35/53

CENTERS FOR DISEASE CONTROL

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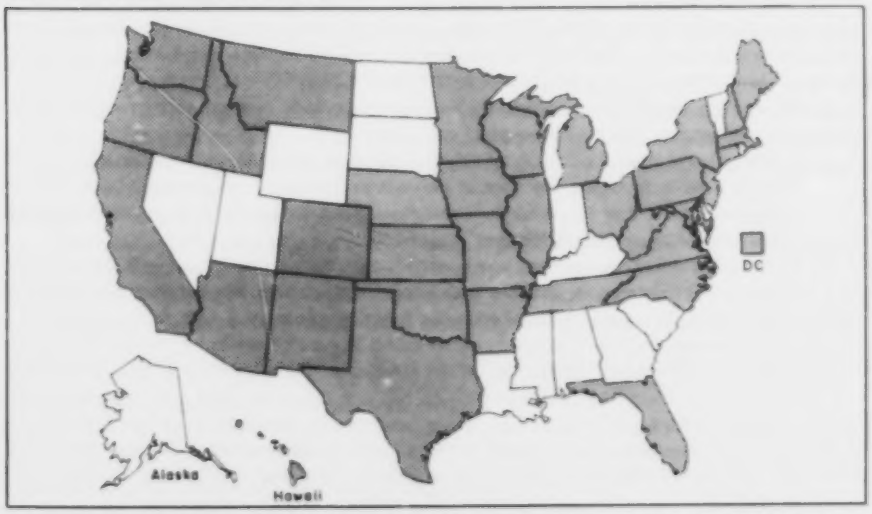
Epidemiologic Notes and Reports

Update on Influenza Activity in the United States, Availability of Influenza Vaccines, and Recommendations for the Use of Vaccines and Amantadine

Update: Influenza Activity — United States

Reports of outbreaks of influenza-like illness increased throughout the continental United States in December. For the week ending January 3, eight states and Puerto Rico reported widespread outbreaks of influenza-like illness, and 17 states and the District of Columbia reported regional outbreaks of influenza-like illness. Most of the reported outbreaks occurred in schools and colleges. No confirmed outbreaks of influenza have been reported in nursing homes or other institutions caring primarily for elderly persons. Consistent with the apparently low impact of the current A(H1N1) strain on the elderly, there has not been a significant increase in mortality from influenza and pneumonia thus far this season. Thirty-four states and the District of Columbia have now reported isolates of A(H1N1) influenza virus (Figure 1). So far this season, influenza type A(H3N2) and type B have been isolated only in association with sporadically occurring cases. Type A(H3N2) influenza has been isolated only in Arizona. Type B influenza has been isolated in two states, California and Texas.

FIGURE 1. States reporting isolates of influenza virus type A(H1N1) — United States, October 1, 1986-January 3, 1987



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Influenza -- Continued

Availability of Influenza Vaccines and Recommendations and Precautions for the Use of Amantadine

Two of the three United States manufacturers of influenza vaccine, Parke-Davis and Wyeth Laboratories, have reported that they have sold all influenza vaccine, both trivalent and monovalent, produced for the 1986-87 season. The third manufacturer, Connaught Laboratories, reported having limited supplies of both the standard trivalent and the supplemental monovalent (A/Taiwan/86) vaccines as of January 5.

The number of unused distributed doses of influenza vaccine is not known. However, spot shortages exist in at least some parts of the country because some state health departments, institutions, and private physicians have reported being unable to replenish dwindling or exhausted supplies.

Reported by State and Territorial Epidemiologists; State Laboratory Directors; Div of Immunization, Center for Prevention Svcs; WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: Although influenza vaccine should be administered before the influenza season, unaffected persons can receive the vaccine after influenza activity begins. Health care personnel should use available vaccine in accordance with the priorities established by the Immunization Practices Advisory Committee (*1,2*). Groups at greatest medical risk of influenza-related complications should receive vaccine before other groups. In particular, remaining supplies of A/Taiwan/86 vaccine should only be used for high-risk persons < 35 years of age. High-risk persons of all ages should receive the standard trivalent vaccine.

If patients are vaccinated after local outbreaks of influenza type A have begun, chemoprophylaxis with amantadine may be indicated for the 2 weeks following vaccination, since it takes about 2 weeks to develop an antibody response. Amantadine prophylaxis should also be considered for high-risk patients if vaccine is unavailable. However, for continuous protection against circulating strains of type A influenza, unvaccinated persons must take amantadine throughout the period of local influenza type A virus circulation, which can be 6 to 12 weeks.

Amantadine may also be used for treating influenza type A. When given within the first 48 hours of illness, amantadine has been shown to reduce the severity and shorten the duration of illness in healthy adults. Although the efficacy of amantadine therapy in preventing complications due to influenza is unknown, it should be considered for high-risk patients who develop influenza-like illness during known influenza type A activity.

In determining whether to use amantadine for prophylaxis or treatment of individual patients, the following information should be considered:

1. In controlled studies, 5% to 10% of healthy young adults taking amantadine have reported side effects involving the central nervous system such as insomnia, nervousness, lightheadedness, and impaired concentration. Such side effects are usually mild and cease soon after amantadine is discontinued.
2. Amantadine is not metabolized and is excreted unchanged by the kidneys. When amantadine is administered to patients with impaired renal function, the dose should be reduced. Because of the diminished renal function associated with normal aging, it is recommended that the dosage in persons ≥65 years of age not exceed 100 mg/day. Tables for estimating dosage based on creatinine clearance for persons with known renal disease have been published (*1,3*). Since these tables may only provide a rough estimate of the optimal dose for a given patient, it is especially important that patients with renal disease as well as persons ≥65 years of age, their relatives, and/or caretakers be informed about potential side effects so that the dosage may be adjusted if necessary.

Influenza — Continued

3. Any patient with an active seizure disorder should not be given more than 100 mg of amantadine daily.
4. The use of amantadine in children < 1 year of age has not been adequately evaluated. The approved dosage for children 1-9 years of age is 4.4 to 8.8 mg/kg/day, not to exceed 150 mg/day. To reduce the risk of toxicity, physicians should consider prescribing the lower range of the approved dosage for children.

References

1. ACIP. Prevention and control of influenza. MMWR 1986;35:317-26,331.
2. ACIP. Monovalent influenza A(H1N1) vaccine, 1986-87. MMWR 1986;35:517-21.
3. Horadam VW, Sharp JG, Smilack JD, McAnalley BH, Garriott JC, Stephens MK, et al. Pharmacokinetics of amantadine hydrochloride in subjects with normal and impaired renal function. Ann Intern Med 1981;94:454-8.

Current Trends

Compendium of Animal Rabies Control, 1987
Prepared by: The National Association of State Public Health Veterinians, Inc.*

Part I: Recommendations for Immunization Procedures

The purpose of these recommendations is to provide information on rabies vaccines to practicing veterinarians, public health officials, and others concerned with rabies control. This document will serve as the basis for animal rabies vaccination programs throughout the United States. Its adoption will result in standardization of procedures among jurisdictions which is necessary for an effective national rabies control program. These recommendations are reviewed and revised as necessary prior to the beginning of each calendar year. All animal rabies vaccines licensed by the U.S. Department of Agriculture and marketed in the United States are listed in Part II of the Compendium, and Part III describes the principles of rabies control.

A. VACCINE ADMINISTRATION

It is recommended that all animal rabies vaccines be restricted to use by or under the supervision of a veterinarian.

B. VACCINE SELECTION

In comprehensive rabies control programs, it is recommended that only vaccines with 3-year duration of immunity be used. This eliminates the need for annual vaccination and constitutes the most effective method of increasing the proportion of immunized dogs and cats. (See Part II)

C. ROUTE OF INOCULATION

Unless otherwise specified by the product label or package insert, all vaccines must be administered intramuscularly at one site in the thigh.

D. WILDLIFE VACCINATION

Vaccination is not recommended since no rabies vaccine is licensed for use in wild animals

*THE NASPHV COMPENDIUM COMMITTEE: Melvin K. Abelseth, DVM, PhD, Chairman; Russell W. Currier, DVM, MPH; John I. Freeman, DVM, MPH; Russell J. Martin, DVM, MPH; Grayson B. Miller, Jr., MD; James M. Shuler, DVM, MPH; R. Keith Sikes, DVM, MPH.
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ENDORSED BY: Council of State and Territorial Epidemiologists; AVMA Council on Public Health and Regulatory Veterinary Medicine.

Rabies – Continued

and since there is no evidence that any vaccine will protect wild animals against rabies. It is recommended that neither wild nor exotic animals be kept as pets. Offspring borne to wild animals bred with domestic dogs or cats will be considered as wild animals.

E. ACCIDENTAL HUMAN EXPOSURE TO VACCINE

Accidental inoculation may occur in individuals during administration of animal rabies vaccine. Such exposure to inactivated vaccines constitutes no known rabies hazard. There have been no cases of rabies resulting from needle or other exposure to a licensed modified live virus vaccine in the United States.

F. IDENTIFICATION OF VACCINATED DOGS

It is recommended that all agencies and veterinarians adopt the standard tag system. This will aid the administration of local, state, national, and international procedures. Dog license tags should not conflict in shape and color with rabies tags. It is recommended that anodized aluminum rabies tags should not be less than 0.064 inches in thickness.

1. **Rabies Tags**

Calendar Year	Color	Shape
1987	Green	Bell
1988	Red	Heart
1989	Blue	Rosette
1990	Orange	Fireplug

2. **Rabies Certificate**. All agencies and veterinarians should use the National Association of State Public Health Veterinarians (NASPHV) form #50 Rabies Vaccination Certificate, which can be obtained from vaccine manufacturers.

Part II: Vaccines Marketed in the United States and NASPHV Recommendations

Product name	Produced by	Marketed by	For use in*	Dosage†	Age at primary vaccination§	Booster recommended
A. MODIFIED LIVE VIRUS						
ENDURALL-R	NORDEN License No. 189	Norden	Dogs	1 ml	3 mos. & 1 yr. later	Triennially
			Cats	1 ml	3 mos	Annually
NEUROGEN-TC	BOEHRINGER INGELHEIM License No. 124	Bio-Ceutic	Dogs	1 ml	3 mos. & 1 yr. later	Triennially
B. INACTIVATED						
TRIMUNE	FORT DODGE License No. 112	Fort Dodge	Dogs	1 ml	3 mos. & 1 yr. later	Triennially
			Cats	1 ml	3 mos. & 1 yr. later	Triennially
ANNUMUNE	FORT DODGE License No. 112	Fort Dodge	Dogs	1 ml	3 mos	Annually
			Cats	1 ml	3 mos	Annually
BIORAB-1	DOUGLAS License No. 165-B	Schering Veterinary TechAmerica	Dogs	1 ml	3 mos	Annually
			Cats	1 ml	3 mos	Annually
BIORAB-3	DOUGLAS License No. 165-B	Schering Veterinary TechAmerica	Dogs	1 ml	3 mos. & 1 yr. later	Triennially
			Cats	1 ml	3 mos	Annually

Rabies — Continued

Part II: Vaccines Marketed in the United States and NASPHV Recommendations — Continued

Product name	Produced by	Marketed by	For use in*	Dosage†	Age at primary vaccination§	Booster recommended
B. INACTIVATED						
RABMUNE 3	DOUGLAS		Dogs	1 ml	3 mos. & 1 yr. later	Triennially
	License No. 165-B	Beecham	Cats	1 ml	3 mos.	Annually
DURA-RAB 1	WILDLIFE VACCINES, Inc.	Wildlife Vaccines, Inc.	Dogs	1 ml	3 mos.	Annually
	KUNZ-TEBBIT License No. 277	Kunz-Tebbit	Cats	1 ml	3 mos.	Annually
RABCINE	BEECHAM		Dogs	1 ml	3 mos.	Annually
	License No. 225	Beecham	Cats	1 ml	3 mos.	Annually
ENDURALL-K	NORDEN		Dogs	1 ml	3 mos.	Annually
	License No. 189	Norden	Cats	1 ml	3 mos.	Annually
RABGUARD-TC	NORDEN		Dogs	1 ml	3mos. & 1 yr. later	Triennially
	License No. 189	Norden	Cats	1 ml	3 mos. & 1 yr. later	Triennially
			Sheep	1 ml	3 mos.	Annually
			Cattle	1 ml	3 mos.	Annually
			Horses	1 ml	3 mos.	Annually
CYTORAB	COOPERS ANIMAL HEALTH, INC.	Coopers	Dogs	1 ml	3 mos.	Annually
	License No. 107		Cats	1 ml	3 mos.	Annually
TRIRAB	COOPERS ANIMAL HEALTH, INC.	Coopers Durvet	Dogs	1 ml	3 mos. & 1 yr. later	Triennially
	License No. 107		Cats	1 ml	3 mos.	Annually
RABVAC 1	FROMM		Dogs	1 ml	3 mos.	Annually
	License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually
RABVAC 3	FROMM		Dogs	1 ml	3mos. & 1 yr. later	Triennially
	License No. 195-A	Fromm	Cats	1 ml	3 mos. & 1 yr. later	Triennially
IMRAB	MERIEUX		Dogs	1 ml	3 mos.	Triennially
	License No. 298	Pitman-Moore	Cats	1 ml	& 1 yr.	Triennially
			Sheep	1 ml	later	Triennially
			Cattle	2 ml	3 mos.	Annually
			Horses	2 ml	3 mos.	Annually
IMRAB-1	MERIEUX		Dogs	1 ml	3 mos.	Annually
	License No. 298	Pitman-Moore	Cats	1 ml	3 mos.	Annually
C. COMBINATION						
ECLIPSE 3 KP-R	FROMM					
	License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually
ECLIPSE 4 KP-R	FROMM					
	License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually
CYTORAB RCP	COOPERS ANIMAL HEALTH, INC.	Coopers	Cats	1 ml	3 mos.	Annually
	License No. 107					

Rabies – Continued

Part II: Vaccines Marketed in the United States and NASPHV Recommendations — Continued

Product name	Produced by	Marketed by	For use in*	Dosage†	Age at primary vaccination§	Booster recommended
C. COMBINATION						
FEL-O-VAX PCT-R	FORT DODGE License No. 112	Fort Dodge	Cats	1 ml	3 mos. & 1 yr. later	Triennially
ECLIPSE 4-R	FROMM License No. 195-A	Fromm	Cats	1 ml	3 mos.	Annually

*Refers only to domestic species of this class of animals.

†All vaccines must be administered intramuscularly at one site in the thigh unless otherwise specified by the label.

§Three months of age (or older) and revaccinated 1 year later.

(Continued on page 815)

TABLE I. Summary – cases specified notifiable diseases, United States

Disease*	53rd Week Ending			Cumulative, 53rd Week Ending		
	Jan. 3, 1987	Dec. 28, 1985	Median 1981-1985	Jan. 3, 1987	Dec. 28, 1985	Median 1981-1985
Acquired Immunodeficiency Syndrome (AIDS)	134	183	N	13,008	8,183†	N
Aseptic meningitis	106	221	209	10,748	10,379	9,733
Encephalitis: Primary (arthropod-borne & unspec.)	15	35	40	1,233	1,320	1,540
Post-infectious	1	3	3	99	118	101
Gonorrhea: Civilian	10,501	13,646	14,160	896,383	883,826	898,104
Military	176	344	344	17,182	20,488	23,791
Hepatitis: Type A	379	654	727	23,117	23,169	23,169
Type B	380	755	755	25,867	26,528	24,482
Non-A, Non-B	43	95	N	3,482	4,081	N
Unspecified	59	114	158	4,401	5,755	7,251
Legionellosis	23	28	N	833	780	N
Leprosy	-	2	12	254	352	351
Malaria	8	28	30	1,089	1,034	1,034
Measles: Total*	42	77	48	6,273	2,812	2,579
Indigenous	40	74	N	5,974	2,373	N
Imported	2	3	N	299	439	N
Meningococcal infections: Total¶	28	68	86	2,481	2,425	2,729
Civilian	28	68	85	2,479	2,418	2,713
Military	-	-	-	2	7	14
Mumps	963	62	84	6,807	2,955	3,348
Pertussis	62	101	101	4,182	3,579	2,288
Rubella (German measles)	2	5	12	502	618	959
Syphilis (Primary & Secondary): Civilian	330	467	459	27,599	28,998	30,876
Military	2	7	7	163	163	361
Toxic Shock syndrome	7	9	N	353	387	N
Tuberculosis	366	997	864	22,575	22,144	23,840
Tularemia	1	3	11	167	178	288
Typhoid fever	-	22	22	323	403	420
Typhus fever, tick-borne (RMSF)	10	11	11	755	698	971
Rabies, animal	54	116	100	5,297	5,394	5,824

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1986		Cum. 1986
Anthrax	-	Leptospirosis	40
Botulism: Foodborne (Wash. 1)	19	Plague	10
Infant (Wash. 1)	71	Poliomyelitis, Paralytic	2
Other	1	Psittacosis	95
Brucellosis (Nebr. 2, Calif. 1)	90	Rabies, human	-
Cholera	17	Tetanus	81
Congenital rubella syndrome	11	Trichinosis (Mass. 1)	38
Congenital syphilis, ages < 1 year	107	Typhus fever, flea-borne (endemic, murine)	48
Diphtheria			

*172 cases were reported between Dec. 29-31, 1985.

†Two of the 42 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending January 3, 1987 and December 28, 1985 (53rd and 52nd Weeks)

Reporting Area	AIDS	Aseptic Menin-gitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel-losis	Leprosy
			Primary	Post-in-fectious			A	B	NA,NB	Unspeci-fied		
	Cum 1986	1986	Cum 1986	Cum 1986	Cum 1986	Cum 1985	1986	1986	1986	1986	1986	Cum 1986
UNITED STATES	13,008	108	1,233	99	896,383	883,828	379	380	43	59	23	254
NEW ENGLAND	517	3	34	3	24,553	22,840	12	41	2	2	2	8
Maine	20	1	6	-	881	1,147	-	3	-	-	1	-
N H	14	1	2	-	594	573	-	-	-	-	-	-
Vt	5	-	4	2	284	335	-	2	-	-	-	-
Mass	272	1	6	-	8,731	9,528	1	26	2	2	1	8
R I	34	-	-	-	1,893	1,843	6	3	-	-	-	-
Conn	172	-	16	1	12,210	9,114	5	7	-	-	-	-
MID ATLANTIC	4,820	3	116	10	160,906	129,038	11	20	2	18	-	20
Upstate N Y	498	3	40	8	19,144	18,178	7	6	1	-	-	1
N Y City	3,269	-	21	1	94,301	62,803	-	4	-	18	-	18
N J	749	-	11	-	20,479	19,592	4	10	1	-	-	-
Pa	304	-	44	3	26,982	28,465	-	-	-	-	-	1
E N CENTRAL	799	7	375	11	114,732	114,850	38	29	1	1	7	5
Ohio	188	7	140	3	30,204	31,737	30	20	-	-	7	-
Ind	67	U	82	3	12,131	12,504	U	U	U	U	U	-
Ill	363	-	52	4	26,568	26,172	-	-	-	-	-	4
Mich	139	-	66	1	38,145	33,516	8	9	1	1	-	1
Wis	42	-	35	-	7,432	10,921	-	-	-	-	-	1
W N CENTRAL	243	13	93	9	38,259	41,074	23	23	4	-	4	4
Minn	98	-	41	-	5,548	5,997	-	-	-	-	-	2
Iowa	20	1	29	-	3,948	4,302	-	3	-	-	-	-
Mo	73	7	3	-	18,817	19,993	-	12	2	-	-	-
N Dak	3	-	4	-	308	288	-	-	-	-	-	-
S Dak	2	-	11	-	783	790	3	-	-	-	-	-
Nebr	11	2	2	1	2,799	3,565	15	6	-	-	3	-
Kans	36	3	3	8	6,056	6,139	5	2	2	-	1	2
S ATLANTIC	1,880	20	156	40	231,354	231,555	33	91	2	6	5	4
Del	23	-	5	-	3,818	4,443	7	1	-	-	-	-
Md	180	3	38	1	27,095	29,589	5	25	1	-	1	-
D C	241	-	1	1	17,183	15,695	2	1	-	-	-	-
Va	158	-	45	1	18,787	19,234	-	-	-	-	-	1
W Va	8	-	46	-	2,273	2,598	2	2	-	-	-	-
N C	81	1	18	2	35,968	36,320	-	9	-	1	-	-
S C	50	-	-	-	19,105	21,328	3	19	-	-	-	-
Ga	285	5	-	1	38,933	44,723	4	19	-	4	3	-
Fla	834	11	4	34	68,192	57,627	10	15	1	1	1	3
E S CENTRAL	162	21	71	4	70,923	76,081	8	39	8	2	-	1
Ky	32	8	32	1	7,825	8,732	7	12	3	-	-	-
Tenn	73	9	9	1	26,857	29,534	1	20	2	2	-	-
Ala	30	3	29	2	20,788	22,508	-	2	-	-	-	1
Miss	28	3	1	-	15,455	15,309	-	5	1	-	-	-
W S CENTRAL	1,189	9	190	8	102,322	110,285	12	14	6	7	1	25
Ark	29	-	-	4	9,590	10,350	1	1	-	1	-	1
La	162	-	19	-	17,618	20,767	-	3	-	-	-	1
Okla	48	4	22	-	11,833	12,470	3	3	1	2	-	-
Tex	950	5	149	4	63,281	66,698	8	7	5	4	1	23
MOUNTAIN	342	1	40	1	26,136	28,022	53	32	7	5	1	13
Mont	5	-	1	1	677	795	7	1	-	-	-	-
Idaho	3	-	-	-	872	991	1	-	-	-	-	-
Wyo	4	-	2	-	535	648	-	-	-	-	-	-
Colo	186	-	5	-	6,889	8,110	2	3	-	-	1	3
N Mex	25	-	3	-	2,772	3,112	8	1	1	2	-	-
Ariz	81	1	19	-	8,542	8,576	29	23	6	3	-	7
Utah	21	-	8	-	1,124	1,349	1	2	-	-	-	1
Nev	37	-	2	-	4,925	4,441	5	2	-	-	-	2
PACIFIC	3,075	29	158	13	127,198	130,381	189	91	13	18	3	174
Wash	174	-	15	1	9,084	10,073	52	8	1	2	1	17
Oreg	63	-	-	-	5,470	6,367	27	10	2	-	-	-
Calif	2,770	24	134	12	108,931	109,081	107	71	8	16	2	118
Alaska	14	-	7	-	2,666	3,178	3	1	2	-	-	-
Hawaii	54	5	2	-	1,319	1,682	-	1	-	-	-	39
Guam	-	U	-	-	225	199	U	U	U	U	U	1
P R	115	-	5	1	2,343	3,076	3	3	-	-	-	7
V I	4	U	-	-	208	395	U	U	U	U	U	-
Pac Trust Terr	-	U	-	-	483	766	U	U	U	U	U	63
Amer Samoa	-	U	-	-	59	-	U	U	U	U	U	3

- Not notifiable U Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 3, 1987 and December 28, 1985 (53rd and 52nd Weeks)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum 1986	1986	Cum 1986	1986	Cum 1986	Cum 1985	Cum 1986	1986	Cum 1986	1986	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985
UNITED STATES	1,089	40	5,974	2	299	2,812	2,481	983	6,807	82	4,162	3,579	2	502	618
NEW ENGLAND	65	-	88	-	16	126	173	2	73	25	208	216	1	10	14
Maine	2	-	12	-	1	1	29	-	-	-	2	9	-	-	-
N H	4	-	43	-	-	-	6	-	15	-	85	113	-	1	3
Vt	2	-	-	-	-	-	19	-	5	2	5	4	-	1	-
Mass	33	-	24	-	13	118	53	2	17	23	83	54	1	5	7
R I	8	-	2	-	-	-	24	-	13	-	7	23	-	2	-
Conn	16	-	7	-	2	7	42	-	23	-	26	13	-	1	4
MID ATLANTIC	148	8	1,948	2	39	236	393	2	220	8	232	271	-	37	234
Upstate N Y	84	-	77	2†	26	86	139	2	78	8	151	134	-	27	21
N Y City	31	8	939	-	6	80	74	-	29	-	10	29	-	5	188
N J	37	-	908	-	5	30	30	-	53	-	20	12	-	5	11
Pa	26	-	26	-	2	40	150	-	60	-	51	96	-	-	14
E N CENTRAL	61	-	1,124	-	28	582	391	74	3,735	-	390	856	-	67	39
Ohio	19	-	-	-	10	60	154	-	150	-	170	120	-	1	-
Ind	2	U	27	U	11	57	39	U	90	U	36	218	U	-	1
Ill	16	-	706	-	4	346	86	73	2,743	-	39	86	-	39	20
Mich	20	-	107	-	-	60	81	1	489	-	36	54	-	15	17
Wis	4	-	284	-	3	59	30	-	283	-	106	380	-	2	1
W N CENTRAL	32	-	324	-	18	14	113	13	242	-	1,409	271	-	14	19
Minn	10	-	45	-	5	6	24	4	52	-	49	139	-	1	2
Iowa	1	-	133	-	1	-	11	9	98	-	19	34	-	1	1
Mo	12	-	28	-	6	5	41	-	27	-	24	35	-	1	7
N Dak	-	-	25	-	1	2	1	-	4	-	5	10	-	1	2
S Dak	2	-	-	-	-	-	5	-	1	-	14	11	-	-	-
Nebr	4	-	1	-	-	-	12	-	2	-	10	11	-	-	-
Kans	3	-	94	-	5	1	19	-	60	-	1,288	31	-	10	7
S ATLANTIC	135	1	809	-	57	344	443	5	266	2	786	571	-	12	56
Del	1	-	1	-	-	-	8	-	1	-	227	2	-	-	2
Md	15	-	26	-	9	115	50	1	32	-	167	328	-	1	6
D C	5	-	-	-	2	31	6	-	1	-	-	-	-	-	-
Va	38	-	36	-	24	28	79	-	46	-	56	21	-	-	2
W Va	4	-	2	-	-	33	4	3	52	-	27	5	-	-	9
N C	7	-	3	-	1	9	69	-	29	1	89	39	-	-	1
S C	7	-	274	-	-	3	48	-	19	-	18	3	-	-	3
Ga	14	-	79	-	14	8	65	-	28	1	136	102	-	-	3
Fla	44	1	388	-	7	117	116	1	58	-	66	71	-	11	30
E S CENTRAL	22	-	61	-	9	7	126	855	1,185	-	47	74	-	4	3
Ky	6	-	-	-	6	5	32	-	6	-	5	9	-	4	3
Tenn	1	-	55	-	1	1	38	855	1,174	-	16	28	-	-	-
Ala	10	-	1	-	1	-	41	-	4	-	25	30	-	-	-
Miss	5	-	5	-	1	1	15	-	1	-	1	7	-	-	-
W S CENTRAL	107	-	680	-	38	493	230	5	421	5	259	575	-	73	42
Ark	1	-	278	-	2	-	31	-	184	-	20	17	-	1	1
La	19	-	4	-	-	42	28	1	8	-	16	18	-	-	-
Okla	12	-	37	-	2	1	33	N	N	5	134	182	-	-	2
Tex	75	-	363	-	34	450	138	4	229	-	89	358	-	72	39
MOUNTAIN	42	-	303	-	29	541	115	3	269	16	298	272	1	25	6
Mont	1	-	-	-	8	137	11	-	6	3	23	10	-	2	-
Idaho	1	-	1	-	-	137	4	-	9	-	51	30	-	-	2
Wyo	-	-	-	-	-	5	2	-	-	-	4	1	-	1	-
Colo	13	-	3	-	8	15	22	-	18	-	66	107	-	1	-
N Mex	5	-	33	-	7	6	14	N	N	-	29	15	-	-	2
Ariz	15	-	252	-	6	241	25	3	209	13	78	49	-	2	1
Utah	4	-	13	-	-	-	10	-	15	-	43	60	1	16	-
Nev	3	-	2	-	-	-	27	-	11	-	4	-	-	3	1
PACIFIC	477	31	637	-	65	469	497	4	396	6	533	473	-	270	206
Wash	33	-	148	-	26	171	67	1	27	2	163	82	-	17	16
Oreg	19	-	7	-	4	5	38	N	N	-	18	54	-	4	2
Calif	423	31	455	-	31	269	384	3	337	4	318	278	-	242	138
Alaska	1	-	-	-	-	-	14	-	8	-	5	30	-	-	1
Hawaii	1	-	27	-	2	24	15	-	24	-	38	19	-	7	48
Guam	2	U	4	U	1	11	1	U	4	U	-	-	U	4	3
P R	4	17	61	-	-	67	4	-	35	-	19	18	-	62	27
V I	-	U	-	U	-	10	-	U	18	U	-	-	U	-	-
Pac. Trust Terr	-	U	-	U	-	-	1	U	11	U	-	-	U	4	-
Amer Samoa	-	U	2	U	-	-	-	U	5	U	-	-	U	1	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 3, 1987 and December 28, 1985 (53rd and 52nd Weeks)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic shock Syndrome	Tuberculosis		Tularemia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985	Cum 1986	Cum 1986	Cum 1986	Cum 1986
UNITED STATES	27,599	26,868	7	22,575	22,144	167	323	755	5,297
NEW ENGLAND	487	588	1	735	744	1	18	13	8
Maine	19	17	-	34	47	-	-	-	-
N H	13	41	-	30	23	-	-	2	1
Vt	9	8	-	17	8	-	-	-	2
Mass	264	286	1	429	449	1	13	4	-
R I	19	20	-	49	53	-	-	3	3
Conn	163	216	-	176	164	-	3	4	2
MID ATLANTIC	3,980	3,636	-	4,364	3,890	2	26	41	676
Upstate N Y	208	271	-	617	661	-	5	20	84
N Y City	2,288	2,190	-	2,316	1,909	-	11	6	-
N J	681	706	-	725	549	2	9	2	17
Pa	823	469	-	706	771	-	1	13	575
E N CENTRAL	855	978	-	2,611	2,867	1	23	44	144
Ohio	141	146	-	463	459	-	9	38	16
Ind	108	83	U	269	336	-	2	-	17
Ill	384	429	-	1,146	1,193	-	3	2	45
Mich	181	254	-	624	537	1	6	4	25
Wis	41	66	-	109	142	-	3	-	41
W N CENTRAL	208	236	-	653	650	48	9	53	844
Minn	33	45	-	155	132	-	2	1	149
Iowa	9	20	-	47	60	1	-	1	192
Mo	110	133	-	323	311	37	6	29	75
N Dak	5	2	-	10	12	-	-	1	156
S Dak	9	6	-	29	31	3	-	6	178
Nebr	11	9	-	18	22	1	-	5	37
Kans	31	22	-	71	82	6	1	10	57
S ATLANTIC	8,485	7,723	-	4,673	4,700	13	48	333	1,333
Del	63	41	-	49	53	-	1	1	1
Md	471	501	-	327	418	2	18	29	580
D C	309	336	-	162	157	1	4	-	41
Va	324	296	-	403	488	3	11	51	201
W Va	20	26	-	126	109	-	3	10	62
N C	533	682	-	737	654	3	4	129	10
S C	715	794	-	593	588	-	1	71	65
Ga	1,543	1,399	-	787	828	4	-	40	201
Fla	4,487	3,648	-	1,489	1,425	-	8	2	172
E S CENTRAL	1,913	2,089	1	1,982	1,925	16	4	120	364
Ky	71	85	1	457	463	7	-	26	106
Tenn	644	845	-	589	578	7	1	45	138
Ala	516	651	-	601	531	1	1	25	117
Miss	582	708	-	335	355	1	2	23	3
W S CENTRAL	5,259	6,206	2	2,883	2,759	89	34	140	723
Ark	255	319	1	399	382	50	-	16	165
La	917	1,076	-	433	388	1	3	1	22
Okla	154	201	1	252	259	13	2	104	62
Tex	3,933	4,610	-	1,799	1,750	5	29	19	474
MOUNTAIN	646	772	1	568	625	12	16	10	660
Mont	7	6	-	29	50	1	1	4	219
Idaho	16	8	-	25	26	-	-	2	9
Wyo	4	14	-	-	8	1	-	1	276
Colo	141	215	-	82	106	3	1	3	29
N Mex	74	126	-	103	94	2	1	-	7
Ariz	289	325	-	257	271	-	9	-	102
Utah	21	13	1	31	31	4	3	-	7
Nev	114	65	-	41	39	1	1	-	11
PACIFIC	5,886	4,660	2	4,106	4,184	5	147	1	545
Wash	168	115	-	221	220	1	3	-	5
Oreg	127	111	2	134	139	-	-	-	4
Calif	5,553	4,360	-	3,502	3,526	3	137	1	527
Alaska	2	4	-	65	110	1	1	-	9
Hawaii	36	70	-	184	189	-	6	-	-
Guam	1	2	U	35	38	-	1	-	-
P R	849	875	-	383	342	-	5	-	48
V I	1	3	U	1	6	-	-	-	-
Pac Trust Terr	314	128	U	97	75	-	49	-	-
Amer Samoa	1	-	U	5	-	-	-	-	-

U Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending January 3, 1987 (53rd Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	760	536	132	52	12	28	67
Boston, Mass	198	124	41	19	5	9	21
Bridgeport, Conn	57	41	8	3	4	1	6
Cambridge, Mass	33	29	1	3	-	-	4
Fall River, Mass	25	17	7	1	-	-	1
Hartford, Conn	79	58	10	6	1	4	3
Lowell, Mass	31	23	6	2	-	-	2
Lynn, Mass	23	21	2	-	-	-	2
New Bedford, Mass	24	21	2	1	-	-	2
New Haven, Conn	66	36	10	4	-	6	4
Providence, R.I	79	57	11	5	1	5	9
Somerville, Mass	6	5	1	-	-	-	-
Springfield, Mass	49	34	9	3	-	3	5
Waterbury, Conn	43	33	8	1	1	-	5
Worcester, Mass	57	37	16	4	-	-	3
MID ATLANTIC	2,883	1,889	584	297	82	51	138
Albany, N.Y	63	50	5	2	1	5	2
Allentown, Pa	18	14	4	-	-	-	-
Buffalo, N.Y	94	36	29	20	8	1	6
Camden, N.J	53	35	13	5	-	-	2
Elizabeth, N.J	13	9	3	1	-	-	1
Erie, Pa†	42	31	8	3	-	-	4
Jersey City, N.J	34	25	7	2	-	-	-
N.Y. City, N.Y	1,634	1,055	338	194	32	15	75
Newark, N.J §	82	36	21	17	4	4	2
Paterson, N.J	29	18	4	3	1	3	-
Philadelphia, Pa	293	185	58	36	6	18	12
Pittsburgh, Pa†	129	98	23	4	2	2	1
Reading, Pa	34	29	4	-	1	-	5
Rochester, N.Y	125	86	27	6	4	2	15
Schenectady, N.Y	31	23	8	-	-	-	3
Scranton, Pa†	32	24	5	1	2	-	-
Syracuse, N.Y	93	71	16	5	-	1	5
Trenton, N.J	14	8	3	2	1	-	1
Utica, N.Y	22	18	3	1	-	-	2
Yonkers, N.Y	48	38	5	5	-	-	2
E.N. CENTRAL	2,311	1,546	498	147	51	71	94
Akron, Ohio	30	21	6	1	-	2	-
Canton, Ohio	38	28	7	-	1	-	5
Chicago, Ill §	564	362	125	45	10	22	16
Cincinnati, Ohio	119	78	30	6	2	2	14
Cleveland, Ohio	159	116	31	6	2	4	3
Columbus, Ohio	172	99	41	14	7	11	5
Dayton, Ohio	103	69	24	6	4	-	3
Detroit, Mich §	283	177	64	26	8	8	6
Evansville, Ind	38	24	9	3	-	-	1
Fort Wayne, Ind	45	35	7	2	1	-	1
Gary, Ind §	11	7	3	1	-	-	-
Grand Rapids, Mich	87	58	19	6	3	2	6
Indianapolis, Ind	158	107	31	5	4	9	2
Madison, Wis §	38	27	8	2	-	1	5
Milwaukee, Wis	136	97	21	10	2	6	8
Peoria, Ill	44	32	11	-	-	1	5
Rockford, Ill	44	31	7	1	4	1	4
South Bend, Ind	55	33	15	4	2	1	5
Toledo, Ohio	117	88	21	8	1	1	3
Youngstown, Ohio	77	59	16	1	1	-	-
W.N. CENTRAL	747	515	155	43	19	15	49
Des Moines, Iowa	38	27	10	1	-	-	3
Duluth, Minn	24	18	3	-	2	1	1
Kansas City, Kans	32	14	12	3	-	3	1
Kansas City, Mo	90	69	16	5	-	-	6
Lincoln, Nebr	31	29	1	1	-	-	2
Minneapolis, Minn	191	143	33	10	4	1	9
Omaha, Nebr	68	44	17	3	2	-	7
St. Louis, Mo	166	98	39	15	9	5	12
St. Paul, Minn	61	40	12	3	2	4	3
Wichita, Kans	48	33	12	2	1	-	5
S. ATLANTIC	1,130	723	248	96	33	29	47
Atlanta, Ga	120	70	28	19	3	2	4
Baltimore, Md	197	127	46	16	5	3	12
Charlotte, N.C	74	38	24	10	2	-	4
Jacksonville, Fla	141	95	31	4	8	3	9
Miami, Fla	103	61	22	15	4	1	1
Norfolk, Va	52	33	9	5	2	2	3
Richmond, Va	70	42	20	5	-	2	2
Savannah, Ga	47	28	15	2	1	1	1
St. Petersburg, Fla	116	100	10	2	3	1	3
Tampa, Fla	80	42	13	1	-	3	4
Washington, D.C	135	73	31	15	5	11	4
Wilmington, Del	15	14	1	-	-	-	-
E.S. CENTRAL	714	478	154	45	25	14	43
Birmingham, Ala	71	49	10	5	3	4	1
Chattanooga, Tenn	57	45	8	2	3	1	5
Knoxville, Tenn	82	55	17	6	3	1	6
Louisville, Ky	95	68	21	3	2	1	8
Memphis, Tenn	212	133	55	12	7	5	14
Mobile, Ala	27	19	4	2	-	2	1
Montgomery, Ala	49	33	11	3	2	-	3
Nashville, Tenn	121	74	30	12	5	-	6
W.S. CENTRAL	975	604	208	91	39	33	48
Austin, Tex	39	24	7	3	2	3	1
Baton Rouge, La	48	35	7	6	-	-	2
Corpus Christi, Tex	37	23	10	2	-	2	3
Dallas, Tex	148	79	33	19	10	7	5
El Paso, Tex	43	26	12	2	-	3	6
Fort Worth, Tex	82	41	16	9	7	9	5
Houston, Tex	170	107	38	20	4	3	5
Little Rock, Ark	41	25	10	5	1	-	3
New Orleans, La	99	60	23	12	4	-	1
San Antonio, Tex	126	84	26	6	6	3	9
Shreveport, La	51	38	9	1	2	3	5
Tulsa, Okla	92	84	19	8	3	-	5
MOUNTAIN	884	470	127	92	19	15	50
Albuquerque, N.Mex	85	60	14	8	1	2	4
Colo. Springs, Colo	58	40	9	3	4	1	9
Denver, Colo	100	68	25	4	1	2	5
Las Vegas, Nev	79	47	22	7	2	1	3
Ogden, Utah	26	19	4	2	1	-	5
Phoenix, Ariz	137	92	32	11	8	4	5
Pueblo, Colo	31	24	5	2	-	-	5
Salt Lake City, Utah	80	43	9	5	1	2	3
Tucson, Ariz	108	77	17	10	1	3	10
PACIFIC	1,870	1,248	376	146	80	46	113
Berkeley, Calif	23	16	4	2	-	1	2
Fresno, Calif	102	75	20	1	1	5	12
Glendale, Calif	22	18	1	4	-	1	-
Honolulu, Hawaii	52	31	10	5	3	3	5
Long Beach, Calif	81	54	18	5	1	3	5
Los Angeles, Calif	514	330	111	47	17	9	11
Oakland, Calif	88	51	20	10	2	5	3
Pasadena, Calif §	27	23	2	1	-	1	1
Portland, Oreg	96	70	15	5	2	4	5
Sacramento, Calif	145	101	35	4	2	3	12
San Diego, Calif	180	102	28	11	6	5	11
San Francisco, Calif	187	102	41	35	6	2	13
San Jose, Calif	167	119	33	5	4	5	10
Seattle, Wash	124	85	27	4	5	3	5
Spokane, Wash	48	38	5	4	1	-	2
Tacoma, Wash	44	35	8	1	-	-	3
TOTAL	12,074††	8,007	2,480	989	310	302	649

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza.

† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

†† Total includes unknown ages.

§ Data not available. Figures are estimates based on average of past 4 weeks.

Rabies – Continued

Part III: Principles of Rabies Control

These guidelines have been prepared by the NASPHV for use by government officials, practicing veterinarians, and others who may become involved in certain aspects of rabies control. It is intended that the NASPHV will annually review and revise these recommendations as necessary. Standardized control procedures are needed to deal effectively with the public health aspects of rabies.

A. PRINCIPLES OF RABIES CONTROL

1. **Human Rabies Prevention**. Rabies in humans can be prevented either by eliminating exposures to rabid animals or in exposed persons by prompt local wound treatment combined with appropriate passive and active immunization. The rationale for recommending pre-exposure and post-exposure rabies prophylaxis and details of their administration can be found in the current recommendations of the Immunization Practices Advisory Committee (ACIP), of the U.S. Public Health Service (USPHS) (*1,2*). These recommendations, along with information concerning the current local and regional status of animal rabies and the availability of human rabies biologics, are available from state health departments.
2. **Domestic Animals**. Local governments should initiate and maintain effective programs to remove stray and unwanted animals and ensure vaccination of all dogs and cats. Since cat rabies cases now exceed the annually reported cases in dogs, immunization of cats should be required. Such procedures in the United States have reduced laboratory confirmed rabies cases in dogs from 6,949 in 1947 to 113 in 1985. The recommended vaccination procedures and the licensed animal vaccines are specified in Parts I and II of the NASPHV's annually released compendium.
3. **Rabies in Wildlife**. The control of rabies in foxes, skunks, raccoons, and other terrestrial animals is very difficult. Selective reduction of these populations when indicated may be useful, but the utility of this procedure depends heavily upon the circumstances surrounding each rabies outbreak. (See C. Control Methods in Wild Animals.)

B. CONTROL METHODS IN DOMESTIC AND CONFINED ANIMALS

1. **Pre-exposure Vaccination and Management**. Animal rabies vaccines should be administered only by or under the direct supervision of a veterinarian. This is the only way to assure the public that the animal has been properly immunized. Within 1 month after vaccination, a peak rabies antibody titer is reached and the animal can be considered to be immunized. (See Parts I and II of the compendium for recommended vaccines and procedures.)
   a. **Dogs and Cats**. All dogs and cats should be vaccinated against rabies commencing at 3 months of age and revaccinated in accordance with Part II of this Compendium.
   b. **Livestock**. It is not economically feasible, nor is it justified from a public health standpoint, to vaccinate all livestock against rabies. Owners of valuable animals and veterinary clinicians may consider immunizing certain livestock located in areas where wildlife rabies is epizootic and where colonies of bats exist.
   c. **Other Animals**.
      (1) **Animals Maintained in Exhibits and in Zoological Parks**. Captive animals not completely excluded from all contact with local vectors of rabies can become infected with rabies. Moreover, such animals may be incubating rabies when captured. Exhibit animals, especially those carnivores and omnivores having contact with the viewing public, should be quarantined for a minimum of 180 days. Since there is no rabies vaccine licensed for use in wild animals, vaccination even with inactivated vaccine is not recommended. Pre-exposure rabies immunization of animal workers at such facilities is recommended. This may reduce the need for euthanasia of valuable animals for rabies testing after they have bitten a handler.

Rabies – Continued

(2) **Wild Animals**. Because of the existing risk of rabies in wild animals (especially raccoons, skunks, and foxes), the American Veterinary Medical Association, the NASPHV, and the Conference of State and Territorial Epidemiologists strongly recommend the enactment of state laws prohibiting the importation, distribution, and relocation of wild animals and wild animals crossbred to domestic dogs and cats. These same organizations continue to recommend the enactment of laws prohibiting the distribution or keeping of wild animals as pets. Moreover, the NASPHV recommends that ferrets not be kept at pets, since they have severely bitten many people, especially inflicting mutilating bites to infants. Ferrets are susceptible to and could transmit rabies. There is no licensed rabies vaccine for use in ferrets.

2. **Stray-Animal Control**. Stray dogs or cats should be removed from the community, especially in rabies epizootic areas. Local health department and animal control officials can enforce the pick-up of strays more efficiently if owned animals are confined or kept on leash. Strays should be impounded for at least 3 days to give owners sufficient time to reclaim animals apprehended as strays and to determine if human exposure has occurred.
3. **Quarantine**.
   a. **International**. Present USPHS regulations (42 CFR No. 71.51) governing the importation of domestic felines and canines are minimal for preventing the introduction of rabid animals into the United States. All dogs and cats imported from countries with endemic rabies should be vaccinated against rabies at least 30 days prior to entry into the United States.† The Centers for Disease Control (CDC) is responsible for these animals imported into the United States. Their requirements should be coordinated with interstate shipment requirements. The health authority of the state of destination should be notified within 72 hours of any animal conditionally admitted into its jurisdiction.

      The conditional admission into the United States of such animals must be subject to state and local laws governing rabies. Failure to comply with these requirements should be promptly reported to the director of the CDC.
   b. **Interstate**. Prior to interstate shipment, dogs and cats should be vaccinated against rabies according to the compendium's recommendations and preferably shall be vaccinated at least 30 days prior to shipment. While in shipment, they should be accompanied by a currently valid NASPHV Form #50 Rabies Vaccination Certificate. One copy of the certificate should be mailed to the appropriate Public Health Veterinarian or State Veterinarian of the state of destination.
   c. **Health Certificates**. If a certificate is required for dogs and cats in transit, it must not replace the NASPHV rabies vaccination certificate.
4. **Adjunct Procedures**. Methods or procedures which enhance rabies control include:
   a. **Licensure**. Registration or licensure of all dogs and cats may be used as a means of rabies control by controlling the stray animal population. Frequently a fee is charged for such licensure and revenues collected are used to maintain a rabies or animal control program. Vaccination is usually recommended as a prerequisite to licensure.
   b. **Canvassing of Area**. This includes house-to-house calls by members of the animal control program to enforce vaccination and licensure requirements.

†In regard to cats, these recommendations do not conform to the official recommendations of CDC and the U. S. Public Health Service. Although domestic feline rabies has increased, there has been no evidence of increased risk of imported rabies in cats. U.S. Foreign Quarantine regulations do not require rabies vaccinations for imported cats.

Rabies – Continued

c. **Citations**. These are legal summonses issued to owners for violations including the failure to vaccinate or license their animals.

d. **Leash Laws**. All communities should adopt leash laws which can be incorporated in their animal control ordinances.

5. **Post-exposure Management**. ANY DOMESTIC ANIMAL THAT IS BITTEN OR SCRATCHED BY A BAT OR BY A WILD, CARNIVOROUS MAMMAL WHICH IS NOT AVAILABLE FOR TESTING SHOULD BE REGARDED AS HAVING BEEN EXPOSED TO A RABID ANIMAL.

a. **Dogs and Cats**. When bitten by a rabid animal, unvaccinated dogs and cats should be destroyed immediately. If the owner is unwilling to have this done, the unvaccinated animal should be placed in strict isolation for 6 months and vaccinated 1 month before being released. Dogs and cats that are currently vaccinated should be revaccinated immediately and observed by the owner for 90 days.

b. **Livestock**. All species of livestock are susceptible to rabies infection; cattle appear to be among the most susceptible of all domestic animal species. Livestock known to have been bitten by rabid animals should be destroyed (slaughtered) immediately. If the owner is unwilling to have this done, the animal should be kept under very close observation for 6 months.

The following are recommendations for owners of livestock exposed to rabid animals:

(1) If slaughtered within 7 days of being bitten, tissues may be eaten without risk of infection providing liberal portions of the exposed area are discarded. Federal meat inspectors will reject for slaughter any animal that has been exposed to rabies within 8 months

(2) No tissues or secretions from a clinically rabid animal should be used for human or animal consumption. However, as pasteurization temperatures will inactivate rabies virus, the drinking of pasteurized milk or eating of completely cooked meat does not constitute a rabies exposure.

6. **Management of Animals That Bite Humans**. A healthy dog or cat that bites a person should be confined and observed for 10 days and evaluated by a veterinarian at the first sign of illness during confinement or before release. Any illness in the animal should be reported immediately to the local health department. If signs suggestive of rabies develop, the animal should be humanely killed and its head removed and shipped, under refrigeration, for examination by a qualified laboratory designated by the local or state health department. Any stray or unwanted dog or cat that bites a person may be killed immediately and the head submitted, as described above, for rabies examination.

C. **CONTROL METHODS IN WILD ANIMALS**

Bats and wild carnivorous mammals, as well as wild animals cross-bred with domestic dogs and cats, that bite people should be killed and appropriate tissues should be sent to the laboratory for examination for rabies. A person bitten by a bat or any wild animal should immediately report the incident to a physician who can evaluate the need for antirabies treatment. (See current rabies prophylaxis recommendations of the ACIP [*1,2*].)

1. **Terrestrial Mammals**. Continuous and persistent government-funded programs for trapping or poisoning wildlife as a means of rabies control are not cost effective in reducing wildlife reservoirs or rabies incidence on a statewide basis. However, limited control in high-contact areas (picnic grounds, camps, suburban areas) may be indicated for the removal of selected high-risk species of wild animals. The public should be warned not to handle wild animals. The state wildlife agency should be consulted early to manage any elimination programs in coordination with the state health department.

Rabies – Continued

2. **Bats**. Rabid bats have been reported from every state except Hawaii and have caused human rabies infections in the United States. It is neither feasible nor practical, however, to control rabies in bats by areawide bat population reduction programs. Bats should be eliminated from houses and surrounding structures to prevent direct association with people. Such structures should then be made bat proof by sealing routes of entrance with screen or other means.

References

1. ACIP. Rabies prevention—United States, 1984. MMWR 1984;33:393-402,407-8.
2. ACIP. Rabies prevention: supplementary statement on the preexposure use of human diploid cell rabies vaccine by the intradermal route. MMWR 1986;35:767-8.

Epidemiologic Notes and Reports

Antibody Response to A/Taiwan/86 (H1N1) Virus in Young Adults Receiving Supplemental Monovalent A/Taiwan/86 Influenza Vaccine Following Trivalent Influenza Vaccine

In accordance with recent recommendations (*1*), monovalent A/Taiwan/86 (H1N1) influenza vaccine was given to U.S. Air Force recruits who had been vaccinated 2 to 3 months previously with the 1986/87 trivalent influenza vaccine. Thirty-four recruits volunteered sera for antibody studies of immune response. At the time the A/Taiwan/86 vaccine was administered, 100% of the recruits had serum hemagglutination-inhibition (HI) antibody titers of ≥32 to the A/Chile/83 (H1N1) virus included in the trivalent vaccine, but only 45% had such titers to the A/Taiwan/86 strain. Following immunization with the supplemental monovalent vaccine, the proportion of recruits with HI antibody titers of ≥32 against A/Taiwan/86 virus increased to 100%, and 92% had HI titers ≥128 (Table 1).

Reported by G Meiklejohn, MD, Patricia Graves, School of Medicine, Univ of Colorado Health Sciences Center, Denver, Col G Hutchison, Lowry Air Force Base, Colorado; Lt Col M Evans, MD, Lackland Air Force Base, Texas; Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: The above findings are consistent with previous reports (*2,3*) that the A/Chile/83 component of the 1986/87 trivalent vaccine may provide inadequate protection against the A/Taiwan/86 virus; protection may be boosted by use of the monovalent A/Taiwan/86 vaccine as recommended (*1*). Because all recently reported outbreaks of influenza A/Taiwan/86-like virus, where laboratory confirmation has been obtained, have occurred in children or young adults, it is particularly important that high-risk individuals in these age groups be given priority for vaccination with the supplemental A/Taiwan/86 vaccine. (See "Update of Influenza Activity, Availability of Influenza Vaccines, and Recommendations and Precautions for the Use of Amantadine", pp. 805-807.)

References

1. ACIP. Monovalent influenza A(H1N1) vaccine, 1986-87. MMWR 1986;35:517-21.
2. CDC. Antigenic variation of recent influenza A(H1N1) viruses. MMWR 1986;35:510-2.
3. CDC. Influenza activity in civilian and military populations and key points for use of influenza vaccines. MMWR 1986;35:729-31.

Influenza Vaccine – Continued

TABLE 1. Pre- and post-vaccination HI antibody response to A/Taiwan/86 antigen in 34 U.S. Air Force recruits receiving supplemental monovalent A/Taiwan/86 vaccine

Test Antigen	Serum Specimen*	Cumulative Percent with HI titer ≥8	≥16	≥32	≥64	≥128
A/Taiwan/86	Pre	72	62	45	37	32
	Post	100	100	100	95	92

*Sera were collected before and 2 to 3 weeks after vaccination with the supplemental monovalent A/Taiwan/86 vaccine. All 34 persons had been vaccinated 2 to 3 months previously with the 1986/87 trivalent influenza vaccine, which contains A/Chile/83(H1N1) antigen, but not A/Taiwan/86(H1N1) antigen.

Notice to Readers

Availability of Informational Material on AIDS

As part of the effort to inform the American public about the cause, modes of transmission, and other aspects of AIDS, the Public Health Service (PHS) and the American Red Cross launched a joint mass media campaign in mid-1985. Three television public service announcements aimed at dispelling misconceptions about getting AIDS from casual contact and at promoting use of the PHS toll-free hotline (1-800-342-AIDS) were developed and aired by stations nationwide. These announcements were recently sent to state AIDS coordinators, requesting that they encourage public service directors of television stations in their states to air them. Printed material produced in conjunction with the campaign is available for distribution.

The following materials, which were produced jointly by the PHS and the American Red Cross, can be obtained by writing to AIDS, Suite 700, 1555 Wilson Boulevard, Rosslyn, VA 22209:

Poster: Four-color poster features singer Patti LaBelle and carries the message,"Don't listen to rumors about AIDS. Get the Facts!" Provides PHS toll-free AIDS hotline number. (Up to 50 free copies)

Leaflets (Up to 50 free copies):

AIDS, Sex and You
Facts About AIDS and Drug Abuse
AIDS and Your Job – Are There Risks?
Gay and Bisexual Men and AIDS
AIDS and Children – Information for Parents of School Age Children
AIDS and Children – Information for Teachers and School Officials
Caring for the AIDS Patient at Home
If Your Test for Antibody to the AIDS Virus is Positive...

Additional materials, which were developed by the PHS, are available from the addresses indicated:

Surgeon General's Report on AIDS (October 1986). Write to AIDS, P. O. Box 14252, Washington, D.C. 20044. (Up to 50 free copies)

Facts About AIDS. Write to AIDS, Suite 700, 1555 Wilson Boulevard, Rosslyn, VA 22209. (Up to 50 free copies)

Scriptographic booklets. Write to Office of Public Inquiries, Centers for Disease Control, Building 1, Room B-63, 1600 Clifton Road, Atlanta, GA 30333. (Up to 25 free copies):

What Everyone Should Know About AIDS (also available in Spanish)

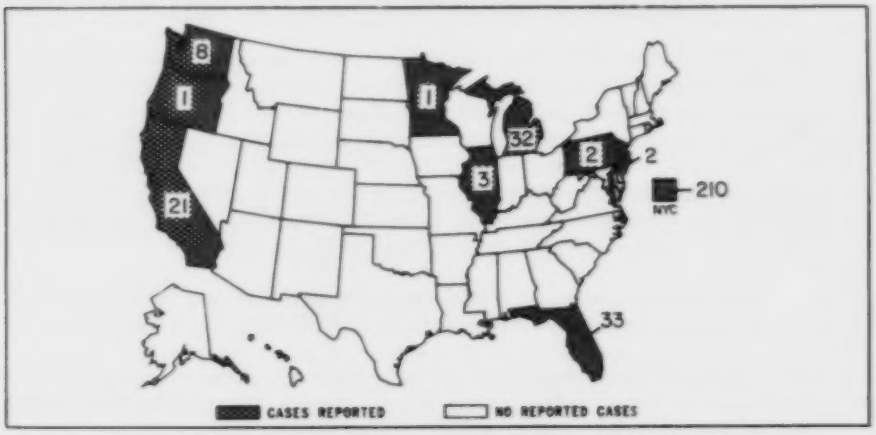
AIDS – Continued

Why You Should Be Informed About AIDS (for health care workers)
What Gay and Bisexual Men Should Know About AIDS
AIDS and Shooting Drugs

Videotapes. To purchase tapes ($55 each), write to National Audiovisual Center, 8700 Edgeworth Drive, Capitol Heights, MD 20743-3701, Attn: Customer Service Section; telephone (301)763-1896. For free loan, write to Modern Talking Picture Service, 5000 Park Street, North, St. Petersburg, FL 33709, Attn: Film Scheduling; telephone (813)541-5763:

AIDS: Fears and Facts (for the general public)
What If the Patient Has AIDS? (for health care workers)
AIDS and Your Job (for policemen, firemen, and other emergency personnel)

FIGURE I. Reported measles cases — United States, weeks 49-52, 1986



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35/54

CENTERS FOR DISEASE CONTROL

August 28, 1987 / Vol. 35 / No. 54

MMWR

INDEX ISSUE

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MORBIDITY AND MORTALITY WEEKLY REPORT

INDEX – VOLUME 35, 1986

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Other *MMWR* Publications in Vol. 35, 1986

No. 54. Index—Volume 35, 1986. August 28, 1987.

No. 55. Summary of Notifiable Diseases, United States, 1986 (Formerly Entitled Annual Summary 19—). September 4, 1987.

Supplements:

No. 1S. NIOSH Recommendations for Occupational Safety and Health Standards. September 26, 1986.

No. 2S. Premature Mortality in the United States: Public Health Issues in the Use of Years of Potential Life Lost. December 19, 1986.

CDC Surveillance Summaries:

No. 1SS. Hysterectomy among Women of Reproductive Age, United States, Update for 1981-1982

Foodborne Disease Outbreaks, Annual Summary, 1982

Nosocomial Infection Surveillance, 1984

No. 2SS. Patterns of Alcohol Consumption and Alcohol-Related Morbidity and Mortality

Abortion Surveillance: Preliminary Analysis—United States, 1982-1983

Trichinosis Surveillance, 1984

The National Occupational Health Survey of Mining

Trends in the Incidence of Endometrial and Ovarian Cancers

Ectopic Pregnancy in the United States, 1970-1983

MMWR

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MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

1 Summaries of Notifiable Diseases in the United States, 1986

49 Historical Summary Tables Covering the Period 1937 - 1986

NOV 2 [illegible]

Summary of NOTIFIABLE DISEASES UNITED STATES

1986

FORMERLY ENTITLED *ANNUAL SUMMARY 19__)*

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Epidemiology Program Office
Centers for Disease Control
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State and Territorial Epidemiologists and State Laboratory Directors ..... Inside back cover

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Foreword

MMWR Summary of Notifiable Diseases, United States, 1986

This volume contains summary tables of the official statistics for calendar year 1986 from the *Morbidity and Mortality Weekly Report (MMWR)* reporting system on the occurrence of notifiable diseases in the United States.

Part 1 contains information on morbidity for each of the 49 currently reportable conditions. The tables show the number of cases of notifiable diseases reported to the Centers for Disease Control (CDC) for 1986, as well as the distribution of cases by month, geographic location, and patient's age.

Part 2 contains graphs and maps depicting summary data for many of the reportable conditions described in tabular form in Part 1.

Part 3 includes tables showing the number of cases of notifiable disease reported to CDC and to the National Office of Vital Statistics for the past 50 years. It also has a table of deaths associated with specified notifiable diseases reported to the National Center for Health Statistics for the period 1975-1984.

As the final publication in each volume of ***MMWR***, the *Summary of Notifiable Diseases, United States, 19--*, will close out the ***MMWR*** series for the stated calendar year. The simplification of the publication into summary tables, graphs, and/or maps – rather than also having explanatory text – will allow production to be expedited.

Data Sources

Data on the reported occurrence of notifiable diseases are routinely published in the *MMWR* and compiled in final form in this summary from annual reports submitted by the state and territorial departments of health.

Notifiable disease reports published in the *MMWR* are the authoritative and archival counts of cases. Data from surveillance records for selected diseases, which are useful for detailed epidemiologic analyses, are published on a periodic basis.

The Epidemiology Program Office gratefully acknowledges the CDC units listed below for their contributions of statistical data and/or graphics from surveillance program records. Requests for further information regarding these data should be directed to the appropriate source.

Center for Infectious Diseases
- AIDS Program (acquired immunodeficiency syndrome)
- Division of Bacterial Diseases (toxic-shock syndrome)
- Division of Vector-Borne Viral Diseases (arboviral infections of the central nervous system)
- Division of Viral Diseases (animal rabies)

Center for Prevention Services
- Division of Quarantine (cholera and plague)
- Division of Tuberculosis Control (tuberculosis)
- Division of Sexually Transmitted Diseases (gonorrhea, syphilis, chancroid, granuloma inguinale, and lymphogranuloma venereum)

Totals for the United States, unless otherwise stated, do not include data for American Samoa, Guam, Puerto Rico, the Virgin Islands, Commonwealth of the Northern Mariana Islands (CNMI), and the Pacific Trust Territory, which includes the Republic of Marshalls, Republic of Palau, and the Federated States of Micronesia. Data from the Pacific Trust Territory exclude those for CNMI.

Data from California are provisional. The California Department of Health Services should be contacted for final data.

Data in this summary should be interpreted with caution. Some diseases such as plague and rabies that cause severe clinical illness and are associated with serious consequences probably are reported quite accurately. However, diseases such as salmonellosis and mumps that are clinically mild and infrequently associated with serious consequences are less likely to be reported. Additionally, subclinical cases are seldom detected except in the course of special studies. The degree of completeness of reporting is also influenced by the diagnostic facilities available, the control measures in effect, and the interests and priorities of state and local officials responsible for disease control and surveillance. Finally, factors such as the introduction of new diagnostic tests (e.g., for hepatitis B) and the discovery of new disease entities (e.g., infant botulism and legionellosis) may cause changes in disease reporting independent of the true incidence of disease. Despite these limitations, the data in this report have proven to be useful in analyzing trends.

Mortality data are from the National Center for Health Statistics. Each year these data are also published in *Vital Statistics of the United States, Vol. II.*

Data on notifiable diseases before 1960 are obtained from publications of the National Office of Vital Statistics.

Data for the 1986 resident population of states and territories are from the U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1010, *State Population and Household Estimates with Age, Sex, and Components of Change*, and Series P-25, No. 1009, *Estimates of the Population of Puerto Rico and the Outlying Areas: 1980 to 1986.* Estimates for New York City and Upstate New York are from *Current Population Reports*, Series P-26, No. 86-A, *Provisional Estimates of the Population of Counties: July 1, 1986.* Estimates for the resident population, by age, sex, and race, are from Series P-25, No. 1000, *Estimates of the Population of the United States, by Age, Sex, and Race: 1980 to 1986.*

Population data from states in which diseases were not notifiable or not available were excluded from rate calculation. Rates in the *1986 Summary of Notifiable Diseases* were calculated using data for the resident population except for chancroid, gonorrhea, granuloma inguinale, lymphogranuloma venereum, and syphilis, for which only data for the civilian resident population were used.

EXPLANATION OF SYMBOLS USED IN TABLES

Data not available	NA
No reported cases	—
Report of disease not required by state health department (not notifiable)	NN

PART 1:

Summaries of Notifiable Diseases in the United States

NOTIFIABLE DISEASES—Summary of reported cases, by month, United States, 1986

Disease	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Acquired immunodeficiency syndrome (AIDS)	12,932	971	851	982	1,327	1,056	850	1,124	1,109	1,226	1,575	899	992	—
Amebiasis	3,530	275	287	271	309	297	293	351	373	251	294	221	277	33
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aseptic meningitis	11,374	423	341	360	417	556	806	1,441	1,984	1,618	1,475	1,002	901	50
Botulism, total*	106	9	6	3	10	3	6	5	13	10	7	28	11	—
Food-borne	23	—	3	—	1	—	—	2	—	5	4	5	3	—
Infant	78	9	3	3	9	3	3	2	11	5	3	21	7	—
Brucellosis (undulant fever)	106	9	3	6	9	8	9	8	14	10	13	2	14	1
Cholera	23	—	—	—	—	—	—	—	11	10	—	1	1	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis, primary infectious	1,302	88	63	73	58	63	76	143	192	181	132	97	136	—
Encephalitis, post infectious	124	12	9	7	12	13	19	9	11	9	9	5	8	1
Gonorrhea†	900,868	70,632	71,058	77,932	67,726	69,241	76,101	79,246	76,046	83,987	79,121	69,284	80,462	—
Hepatitis A§	23,430	1,842	1,669	1,619	1,573	1,633	1,542	1,651	1,874	2,063	2,107	1,784	2,249	1,834
Hepatitis B§	26,107	1,923	1,777	2,063	1,955	2,163	1,926	2,140	2,214	1,987	2,164	1,900	2,384	1,501
Hepatitis, non-A non-B§	3,544	242	273	306	316	332	309	324	322	298	274	240	259	171
Hepatitis, unspecified§	3,940	353	295	314	266	303	242	290	285	267	295	259	376	375
Legionellosis	948	60	49	68	44	78	53	74	108	90	122	78	121	5
Leprosy	270	29	14	32	34	20	24	30	6	16	25	17	21	2
Leptospirosis	41	3	3	4	3	2	4	3	4	5	2	4	4	—
Malaria	1,123	71	41	60	84	80	108	145	146	115	119	75	74	7
Measles (rubeola)	5,282	250	536	788	946	606	909	661	537	186	184	118	340	19
Meningococcal infections, total	2,594	280	274	321	262	236	160	167	130	129	165	188	269	13
Civilian	2,591	280	273	320	262	236	160	167	130	129	165	188	268	13
Military	3	—	1	1	—	—	—	—	—	—	—	—	1	—
Mumps	7,790	756	266	382	495	756	636	454	523	339	363	660	2,633	17
Pertussis (whooping cough)	4,195	194	230	205	351	211	226	290	443	361	1,220	243	216	3
Plague	10	—	—	—	—	1	4	—	3	—	1	—	1	—
Poliomyelitis, paralytic	3	—	—	1	—	—	—	—	—	1	—	—	1	—
Psittacosis	224	5	4	9	5	15	7	15	12	10	7	1	133	1
Rabies, human	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rheumatic fever	147	7	8	8	18	16	34	25	2	2	10	5	12	—
Rubella (German measles)	551	37	57	44	71	64	69	57	35	25	28	29	27	8
Rubella congenital syndrome	14	1	—	—	1	—	—	—	—	7	1	3	1	—
Salmonellosis (excl. typhoid fever)	49,954	2,889	2,173	2,406	2,685	3,571	4,476	5,743	6,479	5,630	5,403	3,749	3,650	1,131
Shigellosis	17,138	1,108	841	889	864	894	1,005	1,781	1,867	2,640	2,092	1,410	1,367	372
Syphilis, primary & secondary†	27,883	2,121	2,100	2,642	1,930	2,481	2,098	1,904	2,746	2,255	2,298	3,095	2,282	—
Tetanus	64	6	2	2	3	11	6	5	10	10	5	—	5	—
Toxic-shock syndrome	412	34	29	37	40	33	30	35	33	30	36	28	46	1
Trichinosis	39	7	5	—	3	1	—	2	3	7	1	5	4	1
Tuberculosis	22,768	1,482	1,514	1,670	1,827	1,963	1,860	2,054	1,918	1,871	1,951	1,671	2,967	—
Tularemia	170	6	2	8	5	12	27	21	18	18	17	20	16	—
Typhoid fever	362	28	13	24	33	24	21	30	58	29	37	26	43	2
Typhus fever														
Flea-borne (endemic, murine)	67	3	4	1	8	18	7	4	3	6	6	2	5	—
Tick-borne (Rocky Mountain spotted)	760	6	1	6	23	86	128	183	136	81	82	18	28	—
Varicella (chickenpox)	183,243	18,687	21,693	29,900	30,553	33,303	19,997	5,893	2,594	1,225	2,879	4,994	11,525	—

*Includes wound and unspecified botulism.

†Civilian cases only.

§Hepatitis reports from New York City are not available. See footnote, page 6.

NOTE: AIDS total updated through June 13, 1987.

NOTIFIABLE DISEASES—Reported cases, by geographic division and area, United States, 1986

Area	Total Resident Population (In Thousands)	AIDS	Amebiasis	Aseptic Meningitis	Foodborne	Botulism Infant	Other
United States	**241,078**	**12,932***	**3,532**	**11,374**	**23**	**79**	**71†**
New England	**12,737**	**524**	**92**	**438**	—	—	—
Maine	1,173	21	6	46	—	—	—
N.H.	1,027	13	1	49	—	—	—
Vt.	541	5	1	30	—	—	—
Mass.	5,832	279	17	151	—	—	—
R.I.	975	30	—	80	—	—	—
Conn.	3,189	176	67	83	—	—	—
Mid. Atlantic	**37,280**	**4,885**	**211**	**1,277**	—	**11**	—
N.Y.(excl NYC)	10,509	504	55	544	—	1	—
N.Y.C.	7,263	3,290	16	182	—	1	—
N.J.	7,619	773	84	280	—	1	—
Pa.	11,888	298	56	301	—	8	—
E.N. Central	**41,737**	**804**	**327**	**2,553**	**2**	**1**	—
Ohio	10,752	189	74	741	—	1	—
Ind.	5,504	68	44	367	—	—	—
Ill.	11,552	383	76	669	—	—	—
Mich.	9,145	142	48	686	2	—	—
Wis.	4,785	42	83	90	—	—	—
W.N. Central	**17,576**	**239**	**140**	**471**	—	—	—
Minn.	4,214	97	33	82	—	—	—
Iowa	2,881	20	54	61	—	—	—
Mo.	5,066	71	26	172	—	—	—
N. Dak.	679	3	—	8	—	—	—
S. Dak.	708	2	1	57	—	—	—
Nebr.	1,588	11	4	27	—	—	—
Kans.	2,460	35	22	64	—	—	—
S. Atlantic	**40,918**	**1,863**	**216**	**2,044**	—	**5**	—
Del.	633	22	1	47	—	4	—
Md.	4,463	182	14	275	—	1	—
D.C.	626	223	—	23	—	—	—
Va.	5,787	158	44	311	—	—	—
W. Va.	1,918	8	1	106	—	—	—
N.C.	6,333	82	11	266	—	—	—
S.C.	3,377	50	—	37	—	—	—
Ga.	6,104	298	104	266	—	—	—
Fla.	11,675	840	41	713	—	—	—
E.S. Central	**15,209**	**165**	**27**	**852**	—	—	—
Ky.	3,729	31	15	242	—	—	—
Tenn.	4,803	74	—	161	—	—	—
Ala.	4,052	32	10	377	—	—	—
Miss.	2,625	28	2	72	—	—	—
W.S. Central	**26,864**	**1,179**	**421**	**1,714**	**2**	**4**	—
Ark.	2,372	25	14	36	—	—	—
La.	4,501	161	4	141	—	—	—
Okla.	3,305	49	9	154	1	—	—
Tex.	16,686	940	394	1,383	1	4	—
Mountain	**13,823**	**342**	**161**	**381**	**1**	**12**	**7**
Mont.	819	5	5	10	—	—	—
Idaho	1,002	3	5	11	—	1	—
Wyo.	507	4	2	12	—	—	1
Colo.	3,267	167	42	88	—	—	—
N. Mex.	1,479	25	26	24	—	2	—
Ariz.	3,319	80	69	153	—	2	6
Utah	1,665	22	8	39	1	7	—
Nev.	963	36	4	24	—	—	—
Pacific	**35,737**	**2,961**	**1,837**	**1,684**	**18**	**46**	—
Wash.	4,462	172	55	136	2	4	—
Oreg.	2,698	63	82	—	1	2	—
Calif.	26,981	2,664	1,758	1,301	7	38	—
Alaska	534	14	2	36	8	—	—
Hawaii	1,062	56	10	192	—	2	—
Guam	127	—	2	3	—	—	—
P.R.	3,274	122	9	84	—	—	—
V.I.	110	3	—	—	—	—	—
Pac. Trust Terr.	NA	—	1,163	3	—	—	—
C.N.M.I.	20	—	19	—	—	—	—
American Samoa	37	—	—	—	—	—	—

NOTE: No cases of anthrax were reported for 1986.
*Updated through June 13, 1987.
†Includes wound and unspecified botulism.

NOTIFIABLE DISEASES—Reported cases, by geographic division and area, United States, 1986 (continued)

Area	Brucellosis	Chancroid	Cholera	Encephalitis Primary infections	Encephalitis Post-infections	Gonorrhea	Granuloma inguinale
United States	**108**	**3,756***	**23**	**1,302**	**124**	**900,868***	**61***
New England	**8**	**83**	—	**40**	**1**	**23,844**	—
Maine	—	—	—	6	—	844	—
N.H.	—	—	—	2	—	592	—
Vt.	—	—	—	8	—	265	—
Mass.	4	79	—	5	—	9,816	—
R.I.	—	1	—	—	—	2,140	—
Conn.	4	3	—	19	1	9,987	—
Mid. Atlantic	**4**	**2,411**	**1**	**128**	**10**	**142,426**	**30**
N.Y.(excl.NYC)	—	3	—	40	5	19,130	—
N.Y.C.	4	2,391	—	20	1	76,437	30
N.J.	—	—	1†	11	1	19,381	—
Pa.	—	17	—	57	3	27,478	—
E.N. Central	**6**	**25**	—	**423**	**19**	**128,988**	**1**
Ohio	1	9	—	138	4	30,507	—
Ind.	—	—	—	87	3	12,624	—
Ill.	3	4	—	93	12	35,978	1
Mich.	1	9	—	65	—	37,776	—
Wis.	1	3	—	40	—	12,081	—
W.N. Central	**16**	**2**	—	**109**	**8**	**38,143**	**1**
Minn.	—	—	—	44	—	5,403	—
Iowa	2	—	—	28	1	3,996	—
Mo.	4	1	—	13	—	18,720	—
N. Dak.	—	1	—	5	—	304	—
S. Dak.	3	—	—	15	—	783	—
Nebr.	6	—	—	2	1	2,797	—
Kans.	1	—	—	2	6	6,140	1
S. Atlantic	**12**	**667**	**3**	**103**	**50**	**235,889**	**24**
Del.	—	1	—	6	—	3,817	—
Md.	1	—	1†	27	5	28,365	—
D.C.	—	11	—	1	1	16,816	—
Va.	3	11	—	45	1	18,742	1
W. Va.	—	—	—	1	—	2,100	—
N.C.	1	13	—	18	2	35,670	—
S.C.	—	1	—	—	—	18,997	1
Ga.	—	306	1	—	1	41,668	21
Fla.	7	354	1	5	40	69,714	1
E.S. Central	**6**	**6**	—	**73**	**4**	**70,778**	—
Ky.	1	5	—	32	1	7,823	—
Tenn.	2	1	—	12	1	26,864	—
Ala.	2	—	—	29	2	20,744	—
Miss.	1	—	—	—	—	15,347	—
W.S. Central	**25**	**454**	**18**	**229**	**14**	**101,854**	**2**
Ark.	6	—	—	—	4	9,507	—
La.	1	30	18	26	—	16,862	2
Okla.	—	—	—	21	1	12,099	—
Tex.	18	424	—	182	9	63,386	—
Mountain	**9**	**6**	—	**30**	**9**	**24,553**	—
Mont.	1	—	—	1	1	667	—
Idaho	—	—	—	—	—	867	—
Wyo.	—	—	—	—	—	551	—
Colo.	4	—	—	5	—	6,726	—
N. Mex.	2	—	—	3	—	2,553	—
Ariz.	1	6	—	19	—	8,448	—
Utah	1	—	—	—	8	1,124	—
Nev.	—	—	—	2	—	3,617	—
Pacific	**20**	**72**	**1**	**167**	**9**	**134,615**	**3**
Wash.	—	1	—	15	1	9,848	—
Oreg.	—	—	—	—	—	5,480	—
Calif.	19	71	—	142	8	115,418	3
Alaska	—	—	—	7	—	2,861	—
Hawaii	1	—	1†	3	—	1,208	—
Guam	—	—	2†	1	—	269	—
P.R.	—	83	—	5	1	2,481	4
V.I.	—	35	—	—	—	359	—
Pac. Trust Terr.	—	NA	—	—	—	NA	—
C.N.M.I.	—	NA	—	—	—	NA	—
American Samoa	—	NA	—	—	—	NA	—

NOTE: There were no cases of diphtheria reported for 1986.
*Civilian cases only.
†Imported cases.

NOTIFIABLE DISEASES—Reported cases, by geographic division and area, United States, 1986 (continued)

Area	Hepatitis A	Hepatitis B	Hepatitis unsp.	Hepatitis non-A non-B	Legionellosis	Leprosy	Leptospirosis	Lymphogranuloma venereum	Malaria
United States	**23,430**	**26,107**	**3,940**	**3,634**	**948**	**270***	**41**	**398†**	**1,123§**
New England	**582**	**1,948**	**132**	**148**	**60**	**8**	**6**	**25**	**67**
Maine	18	186	2	12	4	—	1	—	2
N.H.	42	116	6	13	4	—	—	—	4
Vt.	22	48	—	16	7	—	—	—	2
Mass.	252	1,035	96	71	31	8	1	22	34
R.I.	45	124	3	12	14	—	1	3	8
Conn.	213	459	25	24	NN	—	3	—	17
Mid. Atlantic	**1,308**	**2,220**	**120**	**251**	**97**	**18**	**1**	**92**	**145**
N.Y.(excl.NYC)	520	798	43	84	NA	1	1	—	55
N.Y.C.	NA¶	NA¶	NA¶	NA¶	14	15	—	89	30
N.J.	383	630	58	63	30	2	—	2	36
Pa.	405	792	19	104	53	—	—	1	24
E.N. Central	**1,381**	**2,814**	**205**	**353**	**285**	**18**	**4**	**12**	**77**
Ohio	383	860	48	57	98	—	1	2	19
Ind.	146	351	48	28	38	—	—	1	2
Ill.	342	500	53	146	24	18	1	2	31
Mich.	289	851	56	83	48	1	1	3	20
Wis.	221	252	—	39	79	1	1	4	5
W.N. Central	**714**	**880**	**27**	**137**	**92**	**4**	**5**	**—**	**34**
Minn.	132	172	2	28	7	2	1	—	11
Iowa	45	94	1	28	15	—	1	—	1
Mo.	126	420	15	39	18	—	3	—	12
N. Dak.	45	16	1	12	4	—	—	—	—
S. Dak.	171	19	1	7	14	—	—	—	3
Nebr.	58	65	1	5	12	—	—	—	4
Kans.	137	94	6	18	12	2	—	—	3
S. Atlantic	**2,195**	**5,474**	**383**	**598**	**214**	**4**	**3**	**192**	**143**
Del.	158	104	13	19	3	—	—	—	1
Md.	198	840	29	84	52	—	—	—	17
D.C.	24	89	4	5	2	—	—	3	6
Va.	153	540	42	77	29	1	1	4	36
W. Va.	69	125	13	22	6	—	—	1	5
N.C.	96	608	54	71	43	—	1	5	7
S.C.	42	894	14	32	19	—	—	—	8
Ga.	188	815	22	45	22	—	—	150	14
Fla.	1,268	1,659	172	243	38	3	1	29	49
E.S. Central	**297**	**1,690**	**92**	**170**	**22**	**1**	**1**	**6**	**21**
Ky.	84	276	12	34	7	—	1	4	6
Tenn.	77	677	54	54	NN	—	—	2	1
Ala.	70	576	15	69	9	1	—	—	10
Miss.	66	161	11	13	6	—	—	—	4
W.S. Central	**2,742**	**2,203**	**955**	**315**	**68**	**32**	**9**	**21**	**117**
Ark.	128	128	24	25	3	1	2	—	1
La.	135	357	24	23	5	2	1	17	20
Okla.	342	218	53	62	19	—	—	2	12
Tex.	2,137	1,500	854	205	41	29	6	2	84
Mountain	**2,881**	**1,982**	**379**	**351**	**39**	**12**	**—**	**1**	**43**
Mont.	84	52	9	11	3	—	—	—	1
Idaho	216	72	7	12	2	—	—	—	2
Wyo.	16	19	7	6	—	—	—	—	—
Colo.	210	264	142	41	8	2	—	—	13
N. Mex.	567	287	21	29	7	—	—	—	5
Ariz.	1,427	890	151	188	11	7	—	—	15
Utah	161	144	32	29	8	1	—	1	4
Nev.	200	254	10	35	2	2	—	—	3
Pacific	**11,320**	**6,896**	**1,667**	**1,311**	**81**	**173**	**12**	**47**	**478**
Wash.	1,364	992	165	172	18	19	—	—	35
Oreg.	1,898	646	13	167	2	—	—	—	19
Calif.	7,916	5,061	1,473	958	59	117	1	47	420
Alaska	108	120	12	8	2	—	NN	—	1
Hawaii	14	77	4	6	2	37	11	—	1
Guam	20	12	21	—	—	1	—	—	2
P.R.	140	331	152	10	—	7	1	20	4
V.I.	1	26	1	1	—	—	—	—	—
Pac. Trust Terr.	299	2	48	—	—	147	—	NA	—
C.N.M.I.	1	—	2	—	—	2	—	NA	—
American Samoa	32	16	—	—	—	7	—	NA	—

*Includes 205 imported cases.
†Civilian cases only.
§Includes 1,086 imported cases.
¶Hepatitis cases reported to the New York City Department of Health are not included in this report; of 2,222 cases reported, 171 cases were confirmed (Hepatitis A, 52; Hepatitis B, 110; and Hepatitis non-A non-B, 9). The remaining 2,051 cases reported were not confirmed or distributed by type.

NOTIFIABLE DISEASES—Reported cases, by geographic division and area, United States, 1986 (continued)

Area	Measles Indigenous	Measles Imported	Meningococcal infections	Mumps	Pertussis	Plague	Poliomyelitis Paralytic	Psittacosis
United States	**5,995**	**327***	**2,594**	**7,790**	**4,195**	**10**	**31**	**224**
New England	**88**	**16**	**191**	**74**	**285**	**—**	**—**	**6**
Maine	12	1	20	—	1	—	—	—
N.H.	43	—	9	15	83	—	—	1
Vt.	—	—	20	6	5	—	—	2
Mass.	24	13	76	18	82	—	—	1
R.I.	2	—	22	14	7	—	—	—
Conn.	7	2	44	23	37	—	—	2
Mid. Atlantic	**1,907**	**51**	**450**	**210**	**235**	**—**	**—**	**18**
N.Y.(excl.NYC)	74	29	142	79	153	—	—	4
N.Y.C.	940	6	69	17	10	—	—	—
N.J.	876	5	77	51	20	—	—	—
Pa.	17	11	162	63	52	—	—	6
E.N. Central	**1,111**	**30**	**420**	**4,209**	**467**	**—**	**1**	**15**
Ohio	—	10	154	150	186	—	—	5
Ind.	28	11	49	283	40	—	—	—
Ill.	694	6	91	2,978	51	—	—	3
Mich.	106	—	81	468	36	—	1	5
Wis.	283	3	45	330	111	—	—	2
W.N. Central	**322**	**22**	**113**	**271**	**1,360**	**—**	**—**	**123**
Minn.	45	5	24	94	50	—	—	121
Iowa	132	2	11	96	19	—	—	—
Mo.	24	8	40	23	32	—	—	1
N. Dak.	24	1	1	4	6	—	—	1
S. Dak.	—	—	8	1	14	—	—	—
Nebr.	—	1	13	2	10	—	—	—
Kans.	97	5	16	61	1,229	—	—	—
S. Atlantic	**841**	**57**	**463**	**296**	**800**	**—**	**1**	**16**
Del.	1	—	18	1	226	—	—	2
Md.	26	9	52	34	166	—	—	1
D.C.	—	2	6	1	—	—	—	—
Va.	36	24	79	46	56	—	—	1
W. Va.	2	—	4	58	28	—	—	—
N.C.	3	1	69	29	88	—	—	2
S.C.	301	--	44	19	18	—	—	1
Ga.	79	14	69	46	136	—	—	6
Fla.	393	7	124	62	82	—	1	3
E.S. Central	**61**	**9**	**135**	**1,613**	**49**	**—**	**—**	**3**
Ky.	—	6	32	133	5	—	—	1
Tenn.	55	1	47	1,476	18	—	—	—
Ala.	1	1	41	4	25	—	—	2
Miss.	5	1	15	NN	1	—	—	—
W.S. Central	**688**	**36**	**230**	**433**	**286**	**—**	**—**	**8**
Ark.	281	2	33	183	24	—	—	—
La.	4	—	25	11	16	—	—	2
Okla.	39	—	34	NN	134	—	—	—
Tex.	364	34	138	239	112	—	—	4
Mountain	**302**	**30**	**117**	**268**	**319**	**7**	**—**	**15**
Mont.	—	9	11	6	23	—	—	1
Idaho	1	—	6	9	53	—	—	—
Wyo.	—	—	2	—	4	—	—	—
Colo.	3	8	22	17	84	—	—	7
N. Mex.	31	7	15	NN	29	5	—	5
Ariz.	252	6	22	209	78	1	—	—
Utah	13	—	12	16	44	—	—	—
Nev.	2	—	27	11	4	1	—	2
Pacific	**635**	**76**	**475**	**416**	**534**	**3**	**1**	**30**
Wash.	147	29	62	30	183	—	—	7
Oreg.	6	6	38	NN	16	—	—	4
Calif.	455	31	359	354	299	3	1§	17
Alaska	—	—	13	8	5	—	—	1
Hawaii	27	10	3	24	51	—	—	1
Guam	4	—	2	9	—	—	—	—
P.R.	62	—	5	36	19	—	—	—
V.I.	—	—	—	17	—	—	—	—
Pac. Trust Terr.	5	—	—	9	3	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
American Samoa	2	—	—	8	—	—	—	—

*For measles only, imported inlcudes both out-of-state and international importations.
†Subject to change due to retrospective case evaluations or late reports.
§Imported case.

NOTIFIABLE DISEASES—Reported cases, by geographic division and area, United States, 1986 (continued)

Area	Animal Rabies	Rheumatic Fever, acute	Rubella	Rubella Cong. syndrome	Salmonellosis	Shigellosis	Syphilis Primary & Secondary	Syphilis Cong. (<1 yr)	All Diseases
United States	**5,504**	**147**	**551**	**14**	**49,984**	**17,139**	**27,883***	**359***	**98,215***
New England	**17**	**6**	**10**	**—**	**4,868**	**990**	**471**	**7**	**1,398**
Maine	1	1	—	—	230	10	27	—	82
N.H.	1	NN	1	—	252	37	14	—	16
Vt.	2	—	1	—	128	6	9	—	11
Mass.	8	NN	5	—	2,688	675	241	3	771
R.I.	3	4	2	—	276	26	19	—	97
Conn.	2	1	1	—	1,082	136	161	4	511
Mid. Atlantic	**660**	**—**	**35**	**8**	**10,251**	**1,705**	**3,896**	**58**	**11,196**
N.Y.(excl.NYC)	93	NN	25	—	2,030	276	284	1	872
N.Y.C.	—	NN	5	8	2,770†	6401	2,122	50	6,522
N.J.	17	NN	4	—	2,567	375	571	6	1,983
Pa.	583	NN	1	—	2,884	397	919	11	1,819
E.N. Central	**150**	**34**	**101**	**—**	**7,181**	**1,828**	**1,014**	**10**	**3,421**
Ohio	16	29	1	—	1,327	196	143	1	337
Ind.	19	NA	—	—	715	91	103	—	308
Ill.	48	1	75	—	2,959	1,079	532	9	2,027
Mich.	23	4	24	—	1,285	180	198	—	614
Wis.	46	NA	1	—	895	382	38	—	135
W.N. Central	**885**	**16**	**13**	**—**	**2,190**	**487**	**201**	**—**	**896**
Minn.	177	—	1	—	419	63	27	—	109
Iowa	193	6	1	—	285	23	10	—	83
Mo.	73	1	1	—	729	89	110	—	436
N. Dak.	162	2	1	—	77	18	5	—	8
S. Dak.	192	1	—	—	106	134	5	—	12
Nebr.	37	NN	—	—	196	58	12	—	40
Kans.	61	6	9	—	379	102	32	—	152
S. Atlantic	**1,464**	**2**	**17**	**—**	**10,684**	**1,679**	**8,300**	**125**	**18,858**
Del.	1	NN	—	—	301	19	83	—	110
Md.	684	—	1	—	1,642	233	454	2	1,201
D.C.	42	—	—	—	247	235	301	—	760
Va.	200	NN	—	—	1,456	101	326	2	1,022
W. Va.	64	2	—	—	205	19	14	2	287
N.C.	10	NN	—	—	998	83	536	—	1,348
S.C.	78	NN	—	—	1,075	36	699	17	1,423
Ga.	202	—	4	—	1,600	152	1,563	—	3,256
Fla.	183	NN	12	—	3,160	800	4,344	102	9,429
E.S. Central	**382**	**1**	**4**	**—**	**2,834**	**177**	**1,758**	**15**	**3,837**
Ky.	106	1	4	—	401	31	69	1	199
Tenn.	152	NN	—	—	479	40	599	6	1,225
Ala.	115	NN	—	—	733	51	517	5	1,161
Miss.	9	NN	—	—	421	55	583	1	1,252
W.S. Central	**721**	**1**	**76**	**3**	**4,085**	**3,082**	**5,291**	**71**	**12,757**
Ark.	168	1	1	—	536	97	252	—	566
La.	23	—	—	—	825	304	906	6	2,209
Okla.	80	NN	—	—	481	227	166	2	480
Tex.	470	NN	75	3	2,445	2,454	3,967	63	9,412
Mountain	**529**	**71**	**24**	**—**	**1,767**	**1,963**	**800**	**2**	**1,805**
Mont.	205	—	2	—	65	27	7	—	14
Idaho	9	NN	—	—	79	40	15	—	25
Wyo.	254	7	1	—	28	20	4	—	9
Colo.	32	8	1	—	470	255	134	1	346
N. Mex.	7	2	—	—	411	543	78	—	276
Ariz.	102	—	2	—	454	912	256	1	710
Utah	7	54	15	—	126	134	21	—	55
Nev.	13	NN	3	—	154	32	85	—	170
Pacific	**553**	**16**	**271**	**3**	**7,106**	**5,328**	**6,342**	**61**	**14,249**
Wash.	8	NN	9	—	785	321	194	—	458
Oreg.	5	NN	4	—	235	128	126	—	234
Calif.	520	14	250	3	5,578	4,789	5,985	60	13,486
Alaska	20	2	—	—	88	9	2	—	18
Hawaii	—	—	8	—	430	81	35	1	53
Guam	—	1	5	—	213	162	—	—	53
P.R.	47	—	62	—	288	161	820	—	2,415
V.I.	—	7	2	—	20	5	5	—	47
Pac. Trust Terr.	NA	1	1	—	1	3	NA	NA	NA
C.N.M.I.	NA	—	—	—	30	47	NA	NA	NA
American Samoa	NA	3	—	—	3	2	NA	NA	NA

NOTE: No cases of human rabies were reported for 1986.
*Civilian cases only.
†Based on reports to the Division of Bacterial Diseases.

NOTIFIABLE DISEASES—Reported cases, by geographic division and area, United States, 1986 (continued)

Area	Tetanus	Toxic shock syndrome	Trichinosis	Tuberculosis	Tularemia	Typhoid fever	Typhus fever, Murine	Typhus fever, RMSF	Varicella (Chickenpox)
United States	**64**	**412**	**39**	**22,768**	**170**	**362***	**67**	**780**	**183,243**
New England	**2**	**21**	**14**	**737**	**1**	**14**	**1**	**13**	**20,389**
Maine	1	8	—	38	—	—	—	—	2,714
N.H.	—	3	9	31	—	—	1	2	2,552
Vt.	—	1	—	17	—	—	—	—	NN
Mass.	—	6	5	426	1	11	—	4	8,389
R.I.	1	3	—	48	—	—	—	3	3,692
Conn.	—	—	—	175	—	3	—	4	5,022
Mid. Atlantic	**6**	**34**	**8**	**4,265**	**2**	**34**	**2**	**40**	**8,453**
N.Y. (excl. NYC)	1	NA	1	615	—	7	—	20	6,870
N.Y.C.	—	1	—	2,223	—	11	2	6	1,583
N.J.	4	28	3	724	2	11	—	2	NN
Pa.	1	5	4	703	—	5	4	12	NN
E.N. Central	**10**	**63**	**1**	**2,842**	**2**	**42**	**1**	**43**	**80,275**
Ohio	2	18	1	461	—	9	1	29	11,632
Ind.	1	6	—	307	1	2	—	—	NA
Ill.	5	17	—	1,144	—	20	—	9	25,977
Mich.	1	22	—	910	1	5	—	4	42,666
Wis.	1	—	—	110	—	6	—	1	NA
W.N. Central	**5**	**74**	**1**	**989**	**46**	**11**	**—**	**50**	**25,021**
Minn.	—	15	—	155	—	3	—	1	NN
Iowa	—	8	1	46	1	1	—	1	7,711
Mo.	2	29	—	336	32	6	—	25	5,093
N. Dak.	—	3	—	10	—	—	—	1	563
S. Dak.	1	3	—	29	3	—	—	6	788
Nebr.	1	7	—	19	2	—	—	6	490
Kans.	1	9	—	72	8	1	—	10	10,367
S. Atlantic	**16**	**35**	**5**	**4,783**	**13**	**50**	**3**	**332**	**11,355**
Del.	—	1	—	NA	—	1	—	2	26
Md.	2	3	—	382	2	16	—	29	1,759
D.C.	—	2	1	189	1	4	—	—	24
Va.	—	9	3	415	3	11	1	51	2,324
W. Va.	1	1	—	124	—	3	—	9	6,692
N.C.	—	5	—	722	3	4	—	129	NN
S.C.	2	9	—	593	—	1	—	70	530
Ga.	2	—	—	846	4	—	—	40	NN
Fla.	3	6	1	1,479	—	10	2	2	NN
E.S. Central	**6**	**7**	**—**	**2,032**	**17**	**6**	**—**	**121**	**4,328**
Ky.	—	7	—	464	7	—	—	26	4,328
Tenn.	3	NN	—	597	9	1	—	47	NN
Ala.	3	NN	—	588	1	1	—	25	NN
Miss.	—	—	—	383	1	2	—	23	NN
W.S. Central	**31**	**61**	**3**	**3,011**	**71**	**35**	**53**	**148**	**23,258**
Ark.	1	4	1	425	49	—	—	18	30
La.	7	NN	—	429	1	5	1	2	NN
Okla.	1	39	—	267	13	2	—	107	NN
Tex.	12	18	2	1,890	8	28	52	21	23,228
Mountain	**1**	**51**	**—**	**606**	**13**	**15**	**—**	**12**	**7,266**
Mont.	—	6	—	34	1	1	—	4	445
Idaho	—	6	—	25	—	—	—	3	NN
Wyo.	—	—	—	4	1	—	—	1	284
Colo.	—	11	—	87	3	1	—	3	NN
N. Mex.	—	3	—	111	2	1	—	1	NN
Ariz.	1	9	—	261	1	9	—	—	4,980
Utah	—	13	—	42	4	3	—	—	170
Nev.	—	3	—	42	1	1	—	—	1,387
Pacific	**3**	**66**	**7**	**4,043**	**5**	**156**	**7**	**1**	**2,918**
Wash.	—	21	—	218	1	3	—	—	NN
Oreg.	—	2	—	136	—	1	—	—	NN
Calif.	3	43	—	3,438	3	143	6	1	1,532
Alaska	—	NN	—	72	1	1	NN	NN	NN
Hawaii	—	—	7	179	—	8	1	—	1,386
Guam	—	—	—	44	—	1	—	—	428
P.R.	6	—	—	361	—	5	—	—	4,576
V.I.	—	—	—	7	—	—	—	—	86
Pac. Trust Terr.	—	—	—	160	—	—	—	—	368
C.N.M.I.	—	—	—	23	—	—	—	—	14
American Samoa	—	—	—	NA	—	—	—	—	70

*Includes 141 imported cases and 147 cases unknown origin.

NOTIFIABLE DISEASES—Summary of reported cases, by age group, United States, 1986

Disease	Total	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-49	50-59	60+	Age not stated
AIDS	12,932	69	72	23	6	47	616	2,106	6,028	2,646	950	369	—
Cholera	23	—	1	2	2	—	—	2	5	1	5	5	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—
Gonorrhea	900,868*	(.....	2,224	.....)	8,039	215,918	337,711	184,586	118,298	(.....	34,092	.....)	—
Hepatitis A	23,430	76	1,166	2,520	1,610	1,947	3,953	4,055	4,215	1,400†	826†	1,048†	539
Hepatitis B	26,107	118	148	134	203	2,224	5,735	5,701	5,909	2,035†	1,130†	1,361†	1,279
Hepatitis non-A non-B	3,634	11	32	52	56	269	592	635	732	296†	240†	573†	83
Hepatitis, unspecified	3,940	15	123	334	221	317	678	727	782	252†	143†	228†	96
Measles (rubeola)	6,282	678	1,747	678	1,312	1,159	304	179	125	25†	6†	6†	62
Meningococcal infections, total	2,594	608	643	163	127	254	142	76	125	80†	90†	205†	71
Military	3	—	—	—	—	1	2	—	—	—	—	—	—
Civilian	2,591	608	643	163	127	253	140	76	125	80†	90†	205†	71
Mumps	7,790	142	569	1,768	2,625	1,535	177	84	140	44†	26†	16†	644
Pertussis (whooping cough)	4,195	1,540	1,005	504	272	144	72	84	145	49	23	27	330
Plague	10	—	2	3	—	—	—	—	2	—	2	1	—
Poliomyelitis, paralytic	3	1	1	—	—	—	—	1	—	—	—	—	—
Rubella (German measles)	551	50	79	48	21	44	80	72	53	20†	4†	1†	77
Salmonellosis	49,984	7,286	7,297	2,778	1,681	2,192	3,196	3,224	4,510	2,472†	1,938†	4,921†	7,897
Shigellosis	17,138	504	4,635	2,454	729	640	1,119	1,388	1,860	827†	430†	589†	1,875
Syphilis, primary & secondary	27,883*	(.....	17	.....)	155	3,133	7,885	6,745	6,771	(.....	3,177	.....)	—
Tetanus	64	1	—	—	—	3	1	3	5	4†	5†	36†	1
Tuberculosis	22,768	109	615	280	210	513	1,206	1,871	3,874	3,015	3,138	7,930	7
Typhoid fever	362	2	34	29	35	34	57	33	69	27†	11†	25†	4

*Civilian cases only. Age distributions are estimated.

†Data reported by the state of Illinois for the three age groups over 40 years are recorded as 40+. Cases reported in this grouping are as follows: Hepatitis A (75); Hepatitis B (130); Hepatitis non-A, non-B (63); Hepatitis, unspecified (24); Measles (1); Meningococcal infections, civilian (10); Mumps (20); Rubella (2); Salmonellosis (592); Shigellosis (88); Tetanus (5); and Typhoid fever (2).

NOTE: Hepatitis reports for New York City are not available (see footnote, page 6).

AIDS total updated through June 13, 1987.

Estimates of the resident population of the United States, by age, sex, and race,* July 1, 1986

Age	Total			White			Black and other races			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	**241,078**	**117,380**	**123,718**	**204,301**	**99,808**	**104,493**	**36,777**	**17,553**	**19,225**	**29,306**	**13,892**	**15,414**
<1	3,728	1,908	1,819	3,023	1,552	1,472	704	356	348	564	285	279
1-4	14,400	7,366	7,035	11,651	5,975	5,677	2,749	1,391	1,358	2,157	1,095	1,063
5-9	17,291	8,851	8,440	13,976	7,172	6,804	3,315	1,680	1,636	2,673	1,354	1,319
10-14	16,564	8,487	8,077	13,341	6,849	6,492	3,223	1,638	1,585	2,591	1,314	1,277
15-19	18,610	9,483	9,128	15,206	7,758	7,449	3,404	1,725	1,679	2,785	1,401	1,383
20-24	20,417	10,232	10,185	16,946	8,533	8,413	3,471	1,699	1,772	2,813	1,358	1,455
25-29	22,010	11,026	10,984	18,498	9,347	9,150	3,512	1,678	1,834	2,795	1,325	1,470
30-34	20,774	10,367	10,407	17,549	8,846	8,703	3,225	1,521	1,705	2,491	1,163	1,328
35-39	18,723	9,256	9,467	16,060	8,029	8,031	2,663	1,227	1,436	2,036	931	1,105
40-44	14,346	7,030	7,316	12,409	6,143	6,266	1,936	886	1,050	1,463	662	801
45-49	11,927	5,817	6,110	10,274	5,061	5,213	1,653	756	897	1,282	575	707
50-54	10,887	5,260	5,627	9,429	4,603	4,826	1,458	657	801	1,157	517	639
55-59	11,268	5,359	5,909	9,901	4,742	5,159	1,367	617	750	1,108	504	604
60+	40,134	16,920	23,215	36,038	15,198	20,839	4,097	1,721	2,377	3,393	1,407	1,984
Median age, years	31.8	30.6	33.0	32.7	31.5	33.9	27.2	25.9	28.4	26.9	25.5	28.2

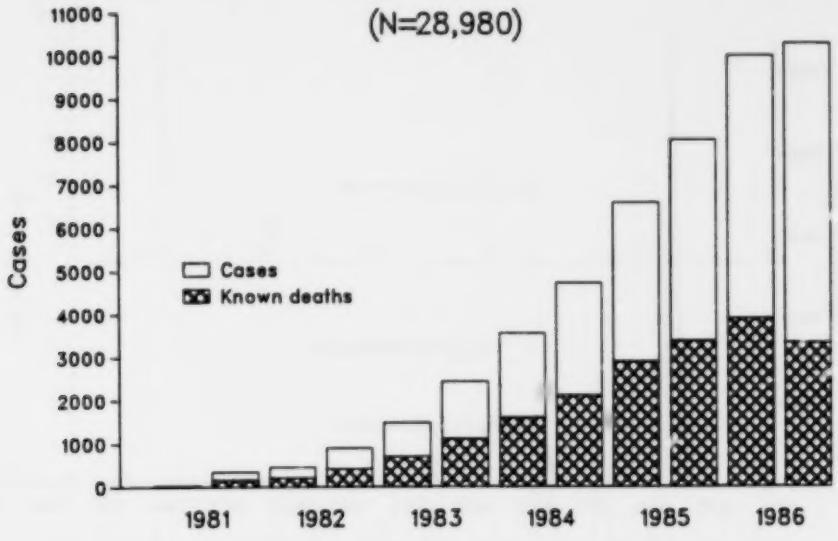
*Numbers in thousands

Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1000, *Estimates of the Population of the United States, by Age, Sex, and Race, 1980-1986*

PART 2:

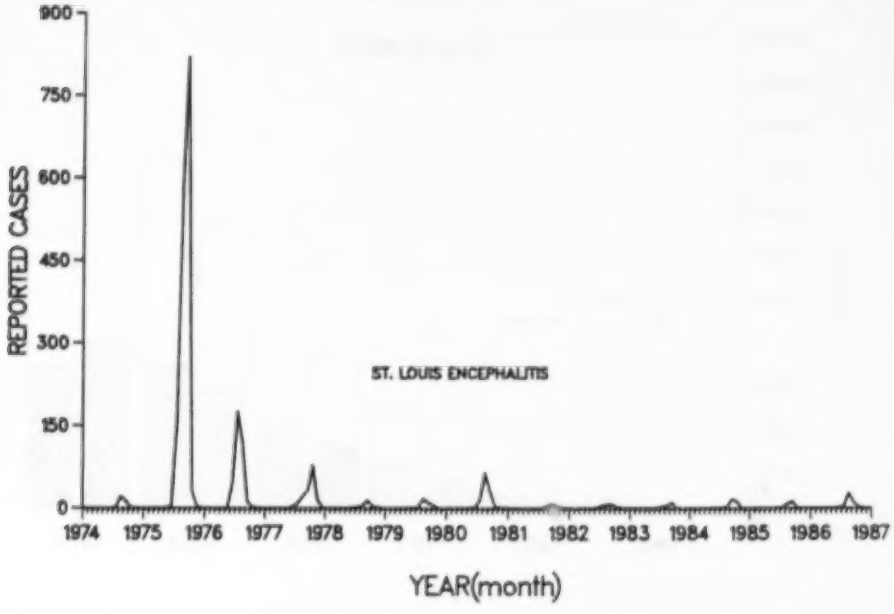
Graphs and Maps for Selected Notifiable Diseases in the United States

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) – Cases and known deaths, by 6-month periods of report to CDC, United States, 1981-1986

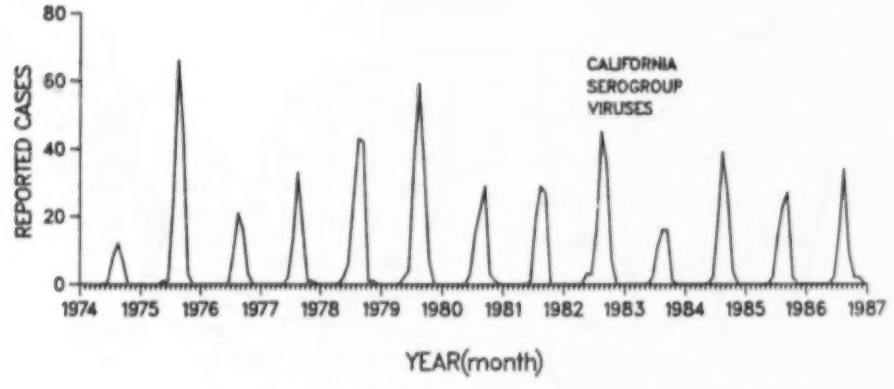


ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) – Cases reported to CDC by state, United States, 1981-1986

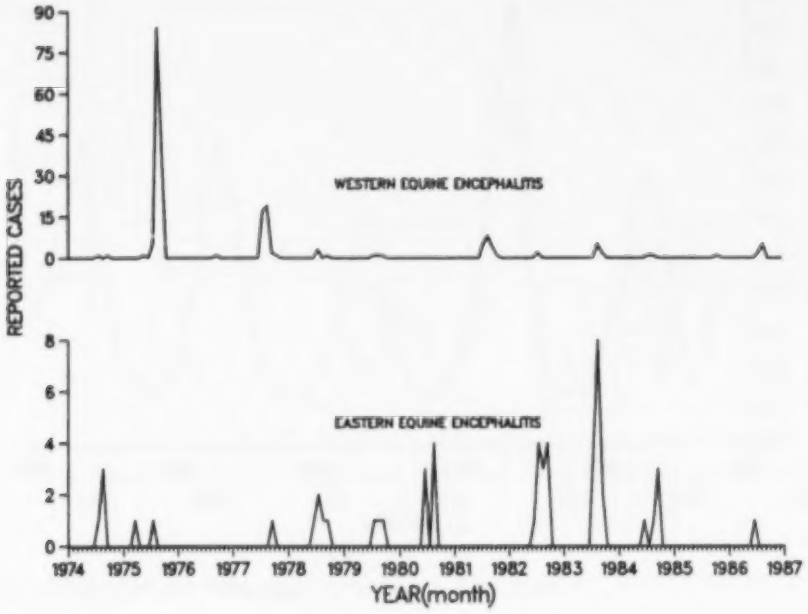
ARBOVIRAL INFECTIONS (of the central nervous system) — Cases due to St. Louis encephalitis virus, by month, United States, 1974-1986



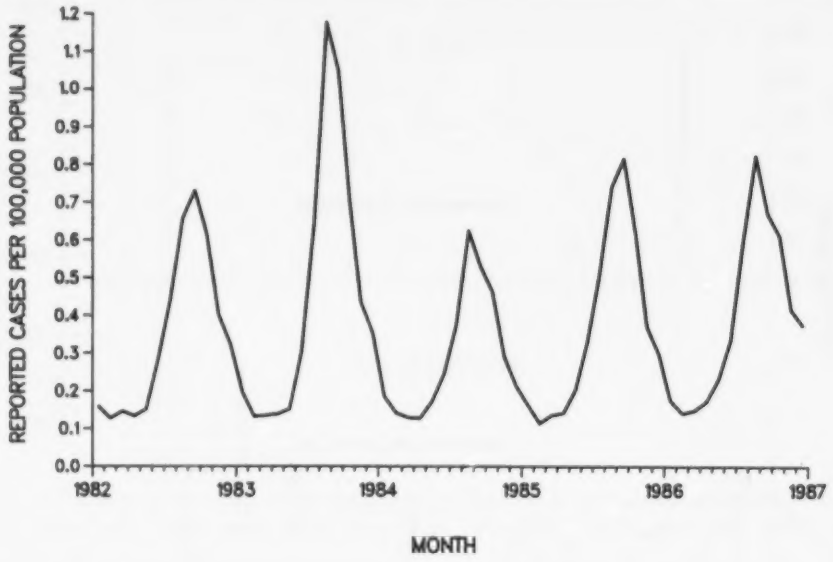
ARBOVIRAL INFECTIONS (of the central nervous system) — Cases due to California serogroup viruses, by month, United States, 1974-1986



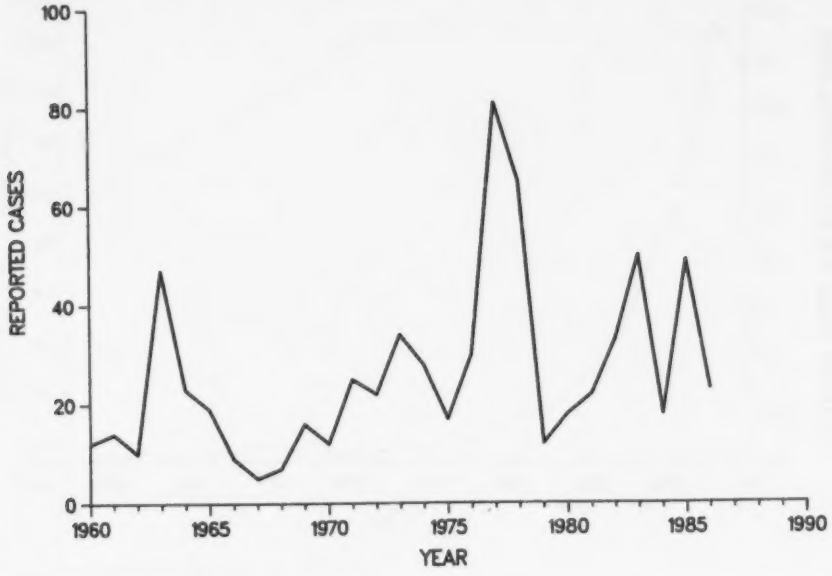
ARBOVIRAL INFECTIONS (of the central nervous system) – Cases due to Western and Eastern equine encephalitis viruses, by month, United States, 1974-1986



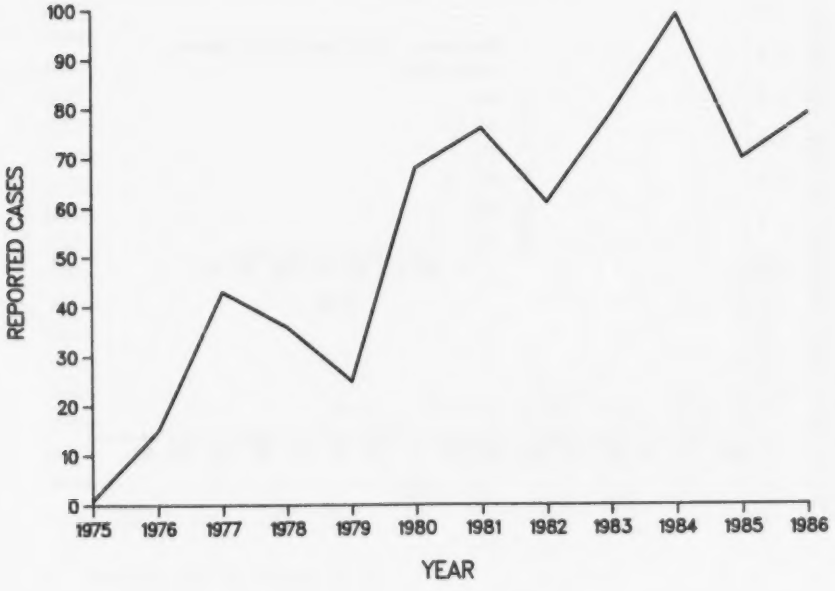
ASEPTIC MENINGITIS – By month, United States, 1982-1986



BOTULISM (foodborne) – By year, United States, 1960-1986

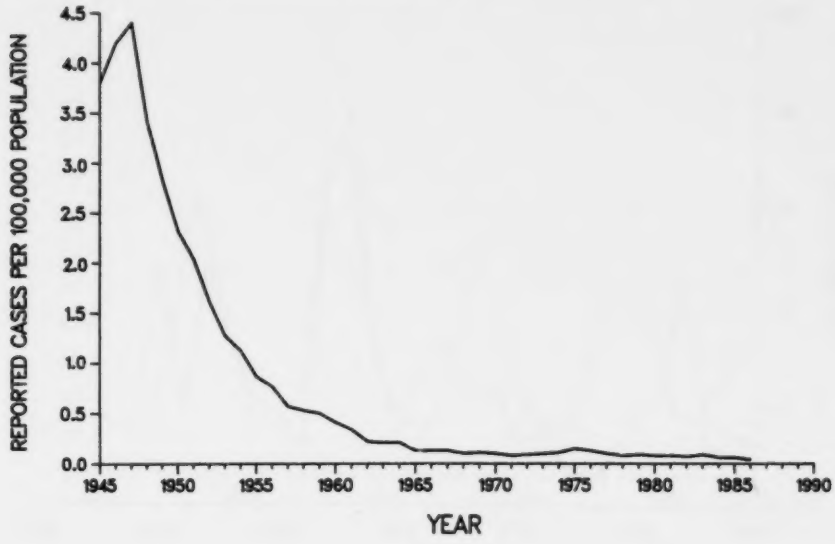


BOTULISM (infant) – By year, United States, 1975-1986

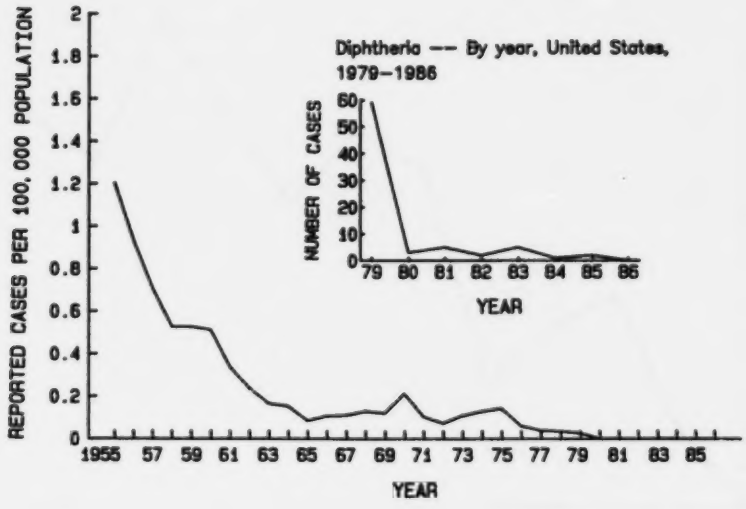


GRAPHS AND MAPS

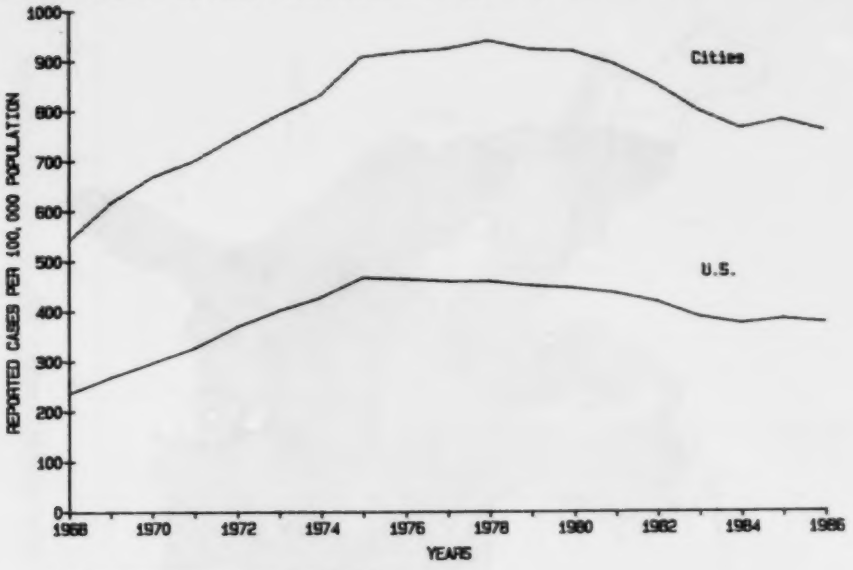
BRUCELLOSIS – By year, United States, 1945-1986



DIPHTHERIA – By year, United States, 1955-1986

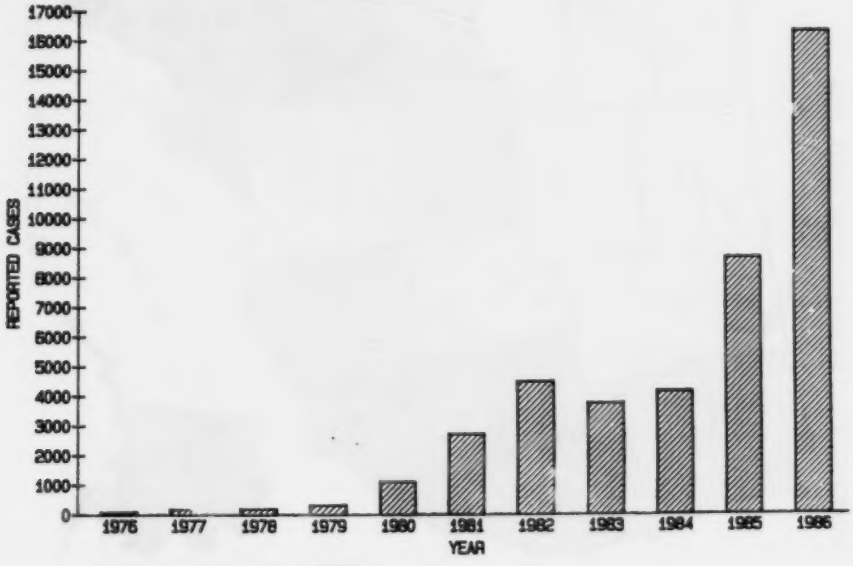


GONORRHEA – By year, United States and large cities,* 1968-1986



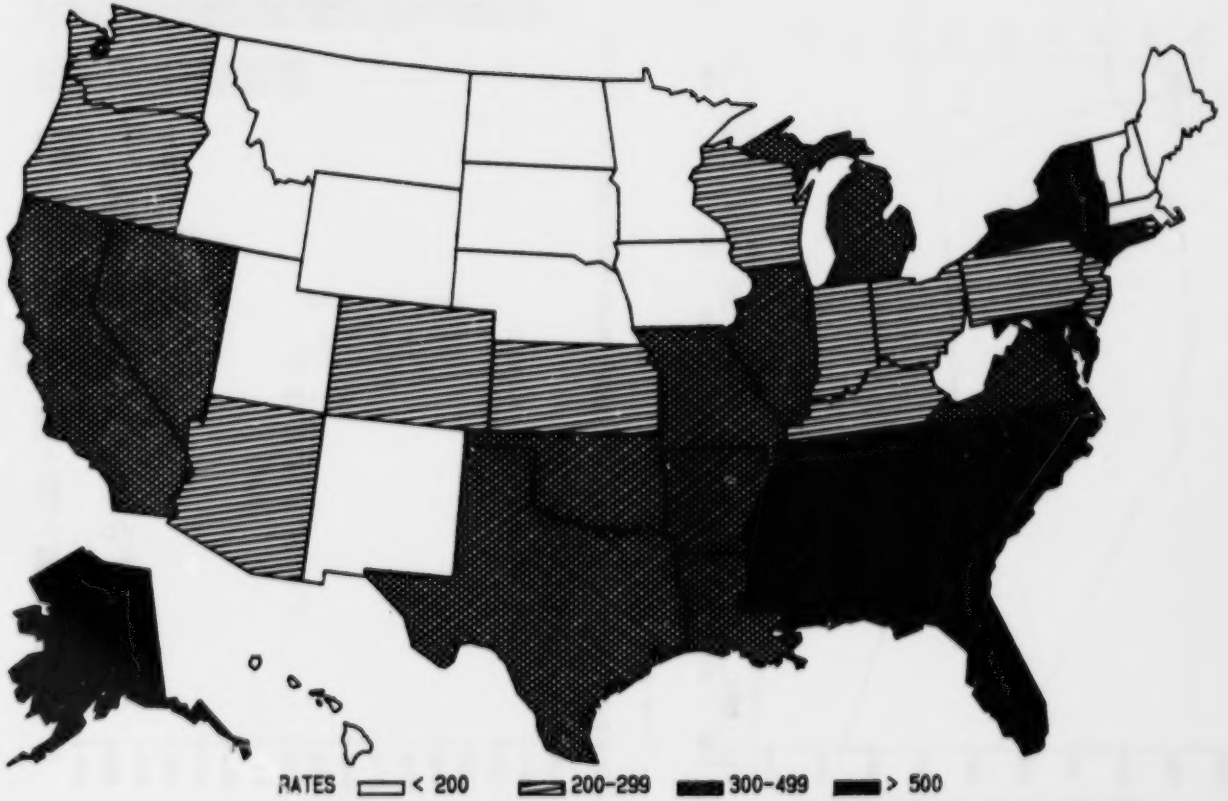
*Cities with population over 200,000.

GONORRHEA – Total resistant strains, United States, 1976-1986



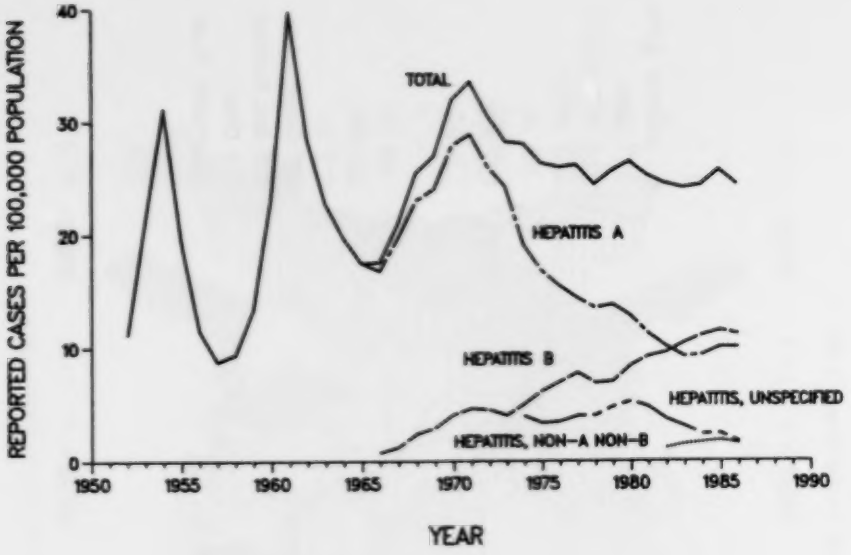
First case reported in March 1976

GONORRHEA – By state*, United States, 1986

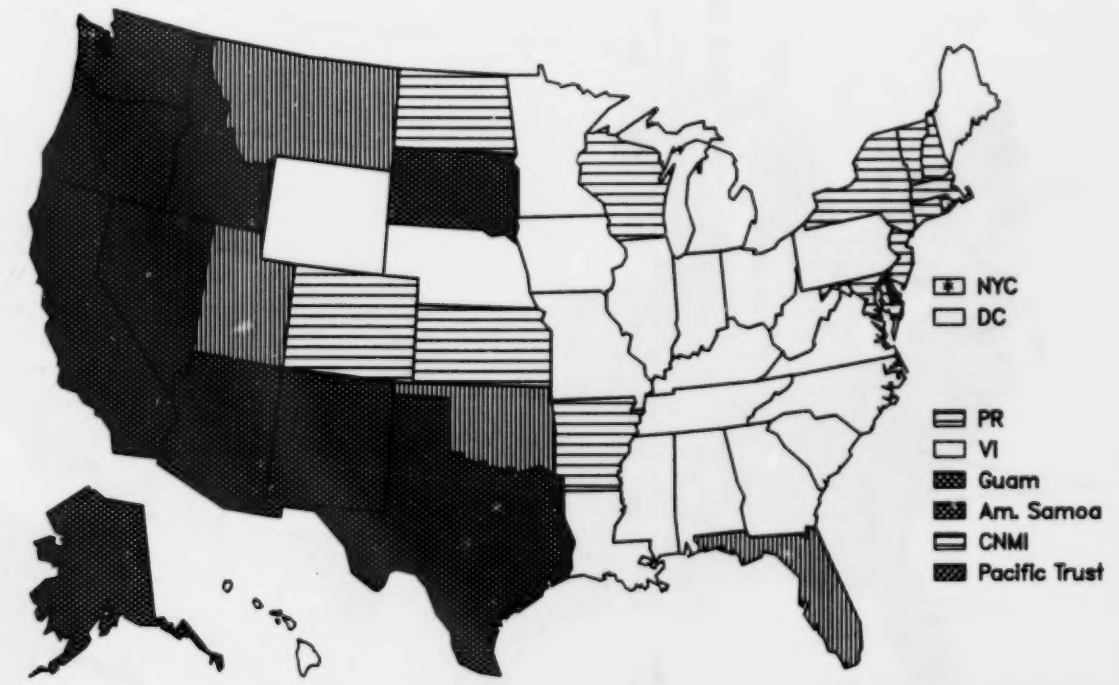


*Based on reported cases per 100,000 population.

HEPATITIS – By year, United States, 1952-1986

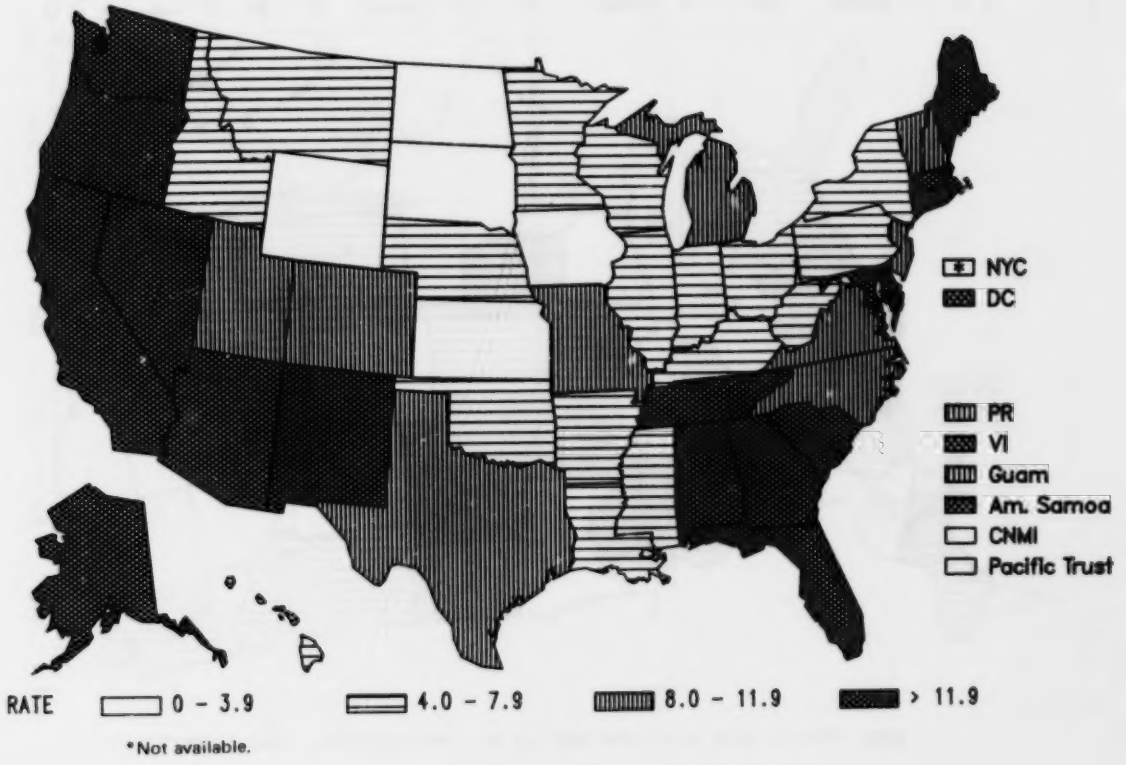


HEPATITIS A – Reported cases, per 100,000 population, United States, 1986



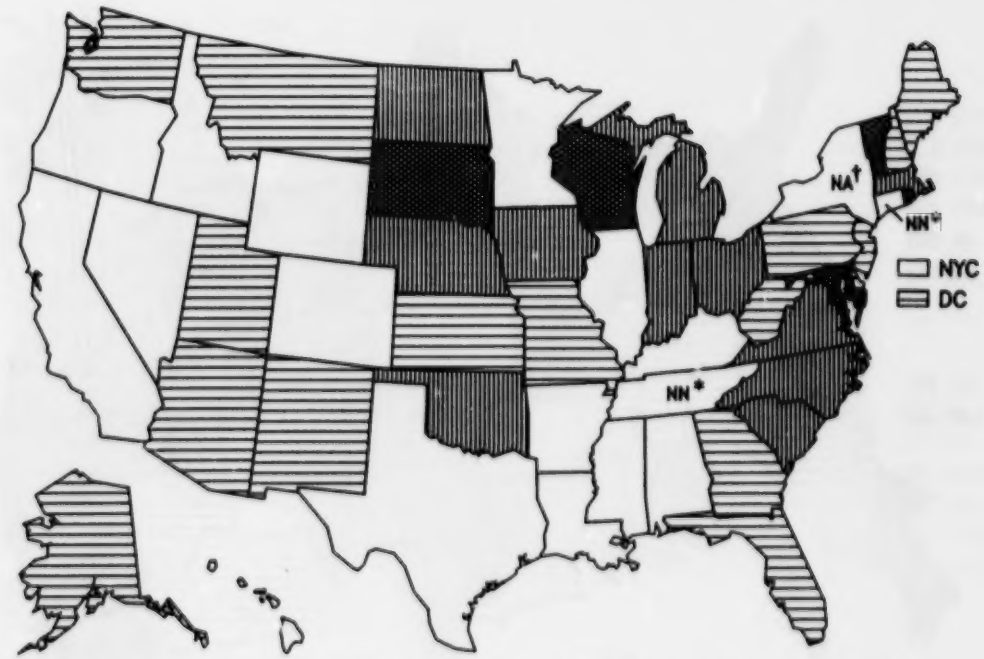
*Not available.

HEPATITIS B – Reported cases, per 100,000 population, United States, 1986



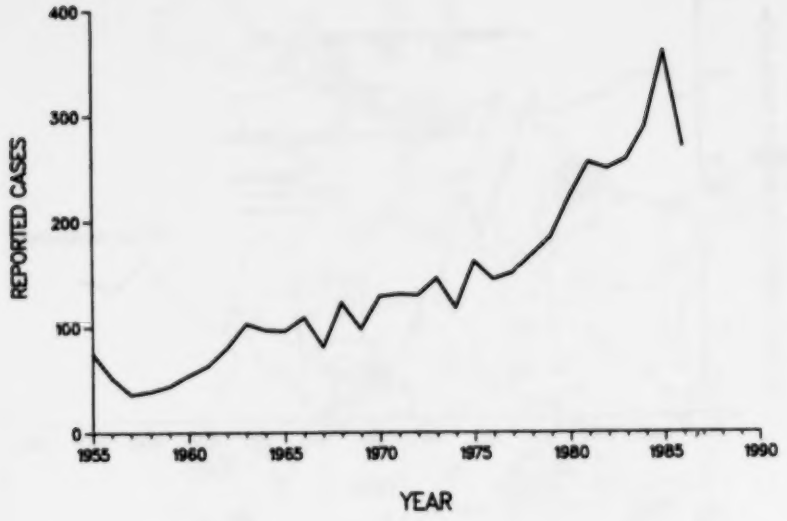
*Not available.

LEGIONELLOSIS – Reported cases, per 100,000 population, United States, 1986

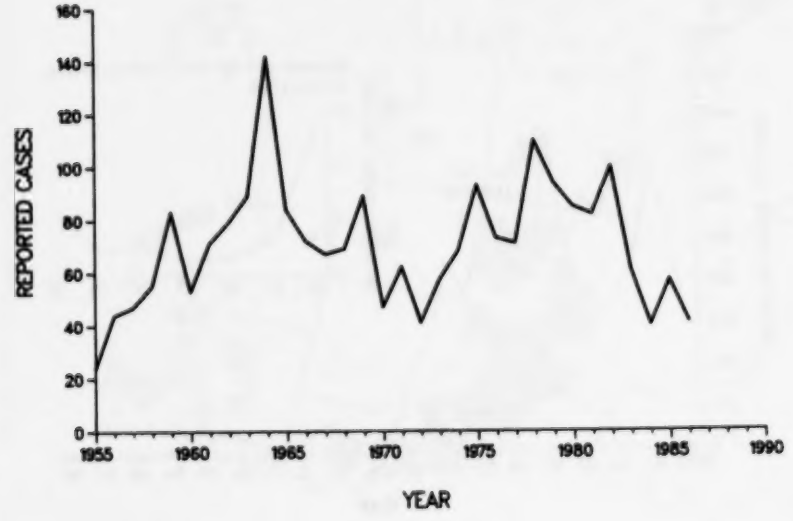


*Not notifiable.
†Not available.

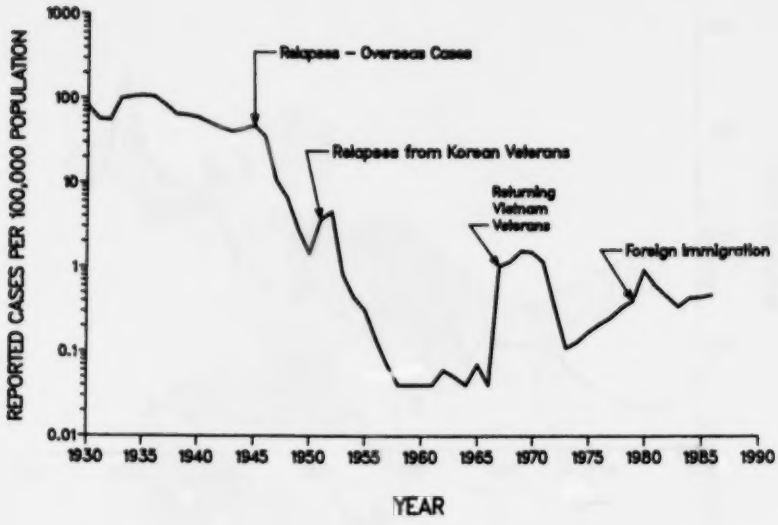
LEPROSY – By year, United States, 1955-1986



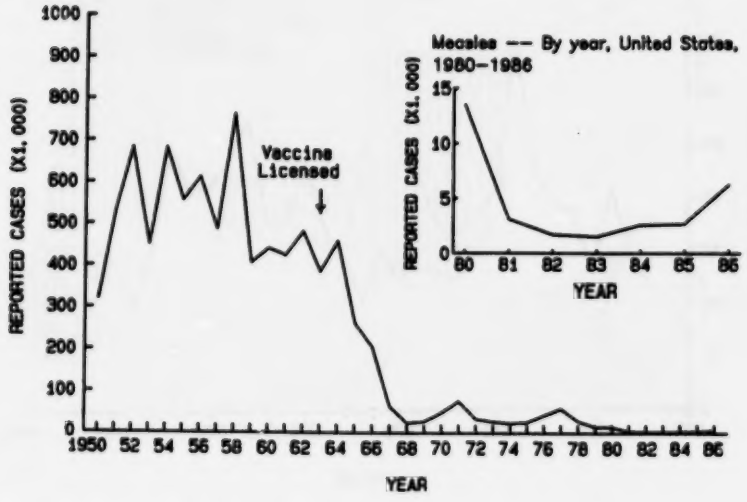
LEPTOSPIROSIS – By year, United States, 1955-1986

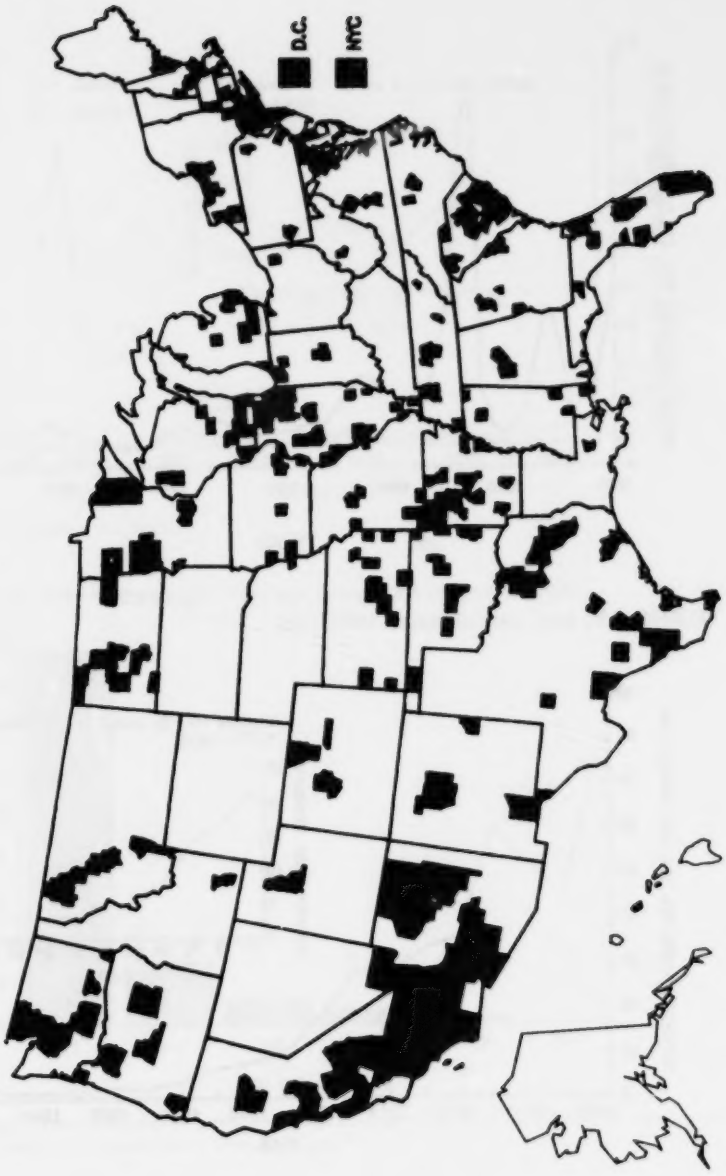


MALARIA – By year, United States, 1930-1986



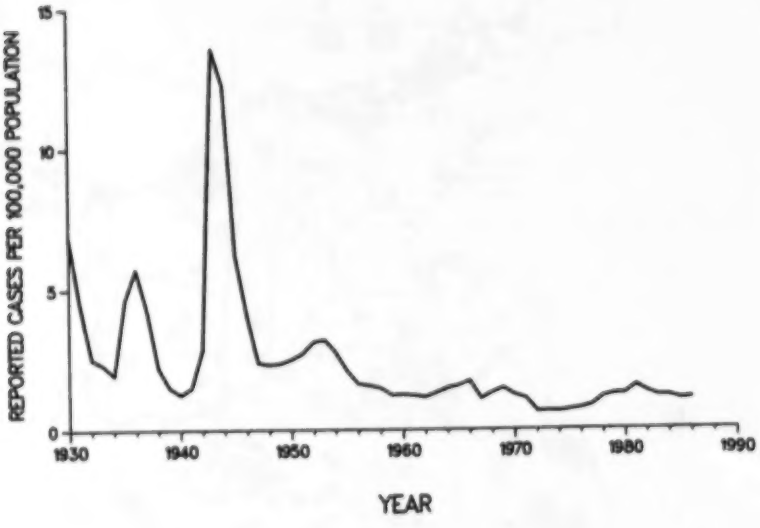
MEASLES (rubeola) – By year, United States, 1950-1986



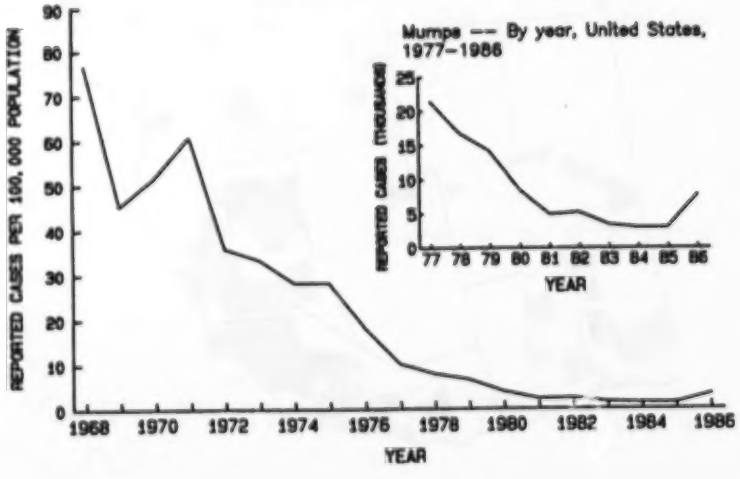


MEASLES (rubeola) — Counties reporting cases, United States, 1986

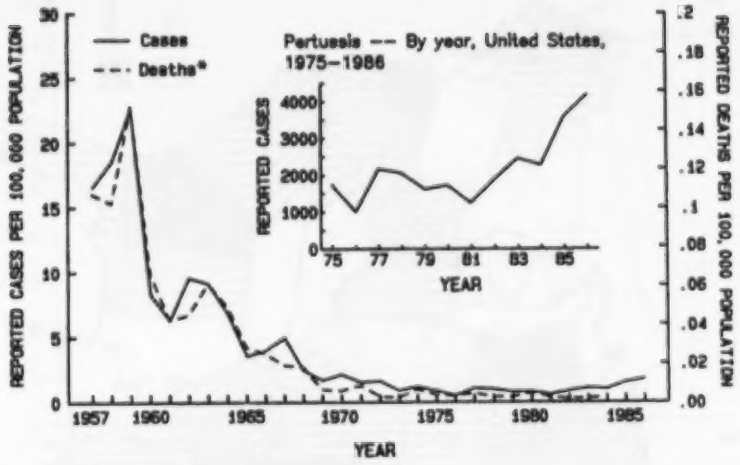
MENINGOCOCCAL INFECTION – By year, United States, 1930-1986



MUMPS – By year, United States, 1968-1986

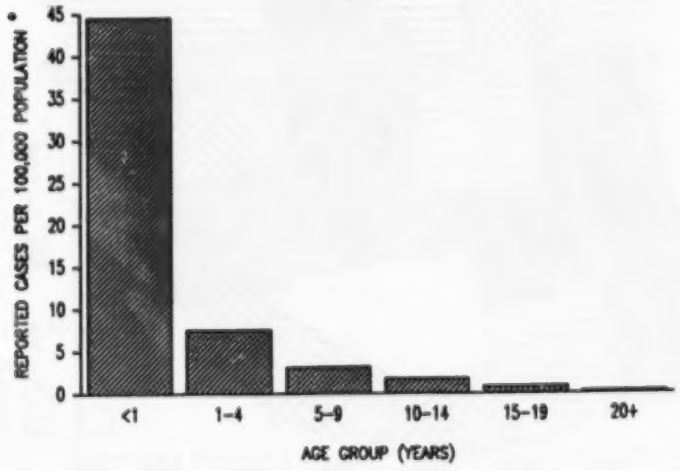


PERTUSSIS (whooping cough) – By year, United States, 1957-1986



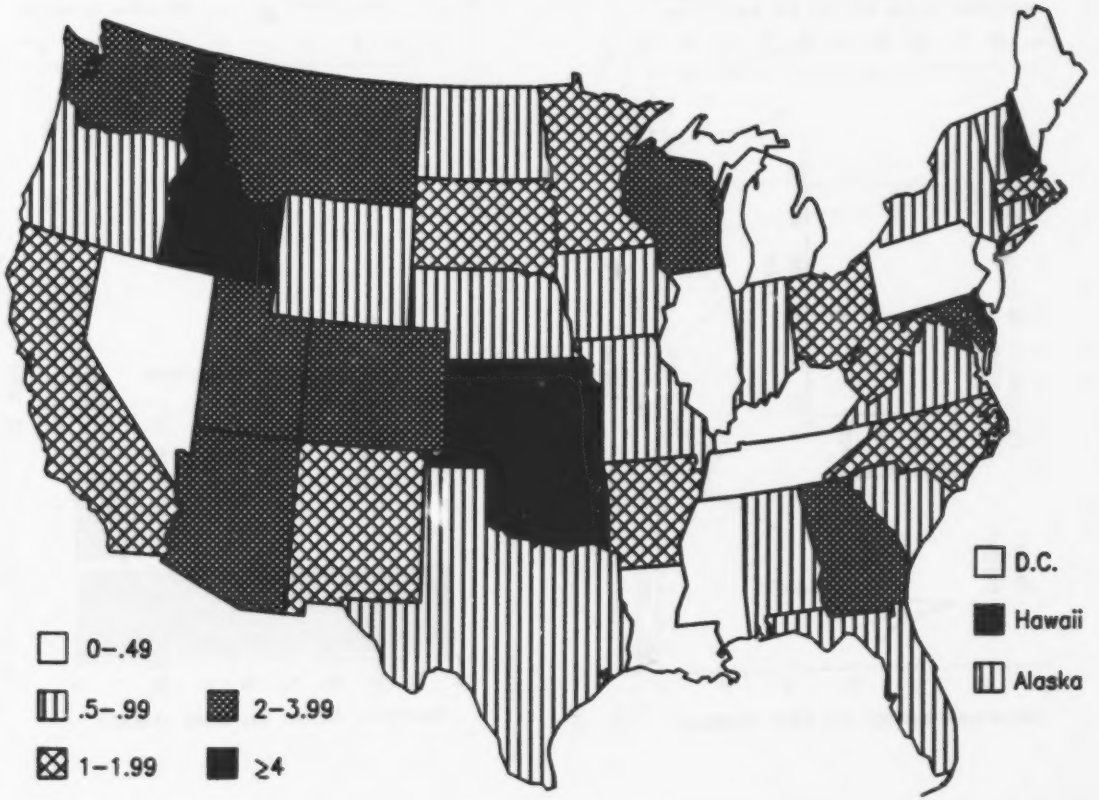
*Data not available for 1985-86.

PERTUSSIS (whooping cough) – By age group, United States, 1986

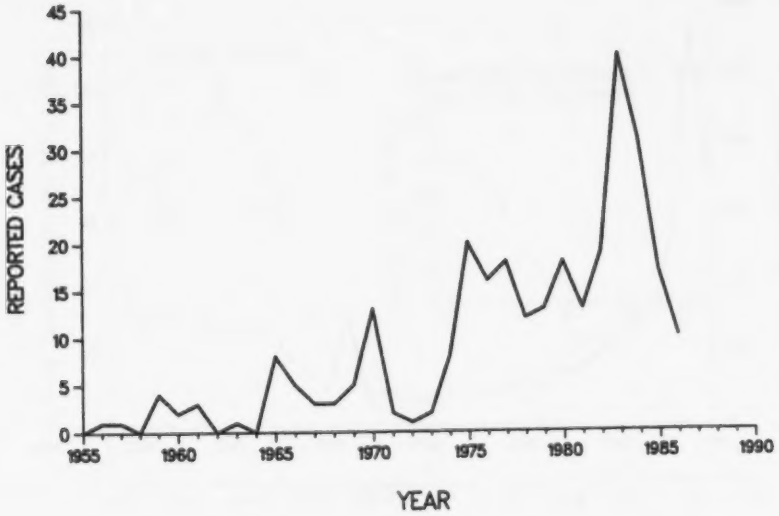


*Rates were calculated by multiplying the percentage of cases with known age group by total reported cases and dividing by the population in that age group.

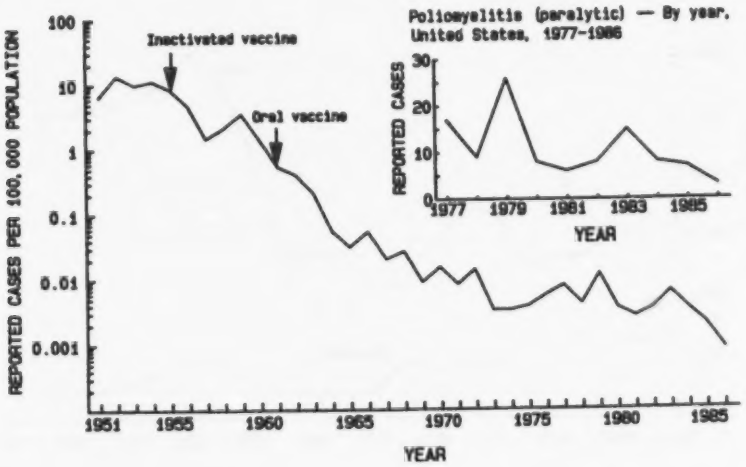
PERTUSSIS (whooping cough) – Reported cases per 100,000 population, United States, 1986



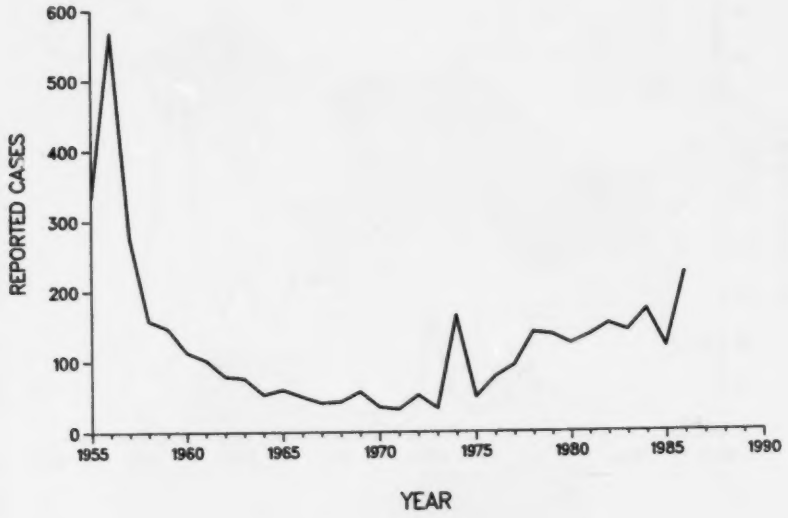
PLAGUE — In humans, by year, United States, 1955-1986



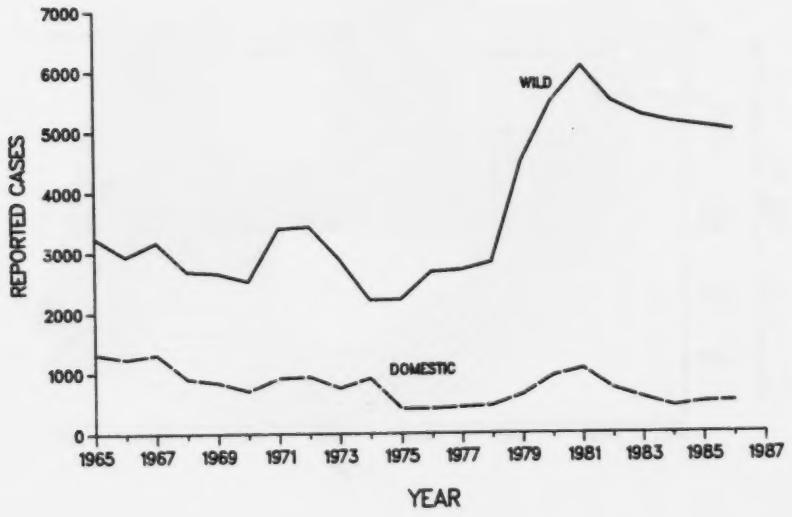
POLIOMYELITIS (paralytic) — By year, United States, 1951-1986



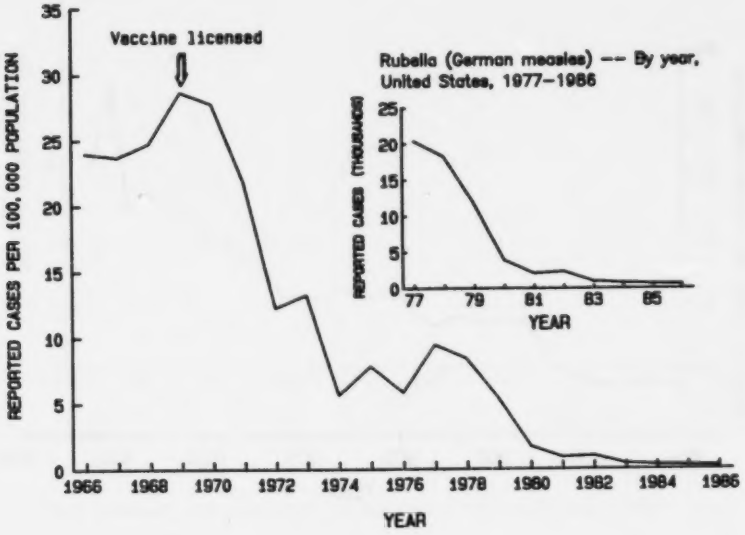
PSITTACOSIS – By year, United States, 1955-1986



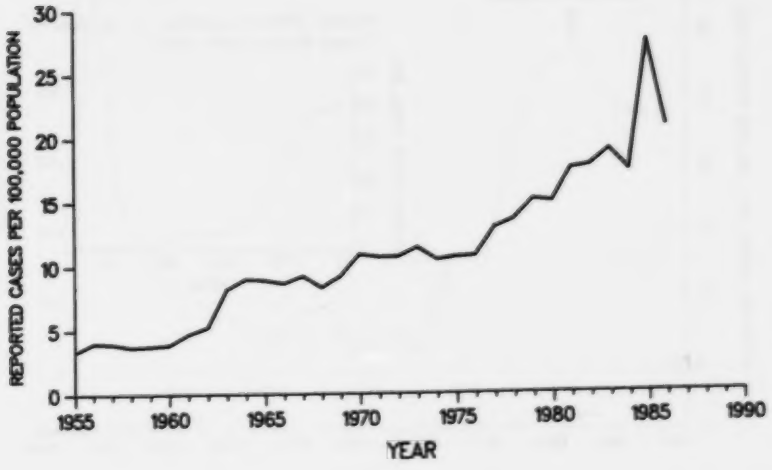
RABIES – Wild and domestic animals, by year, United States, 1965-1986



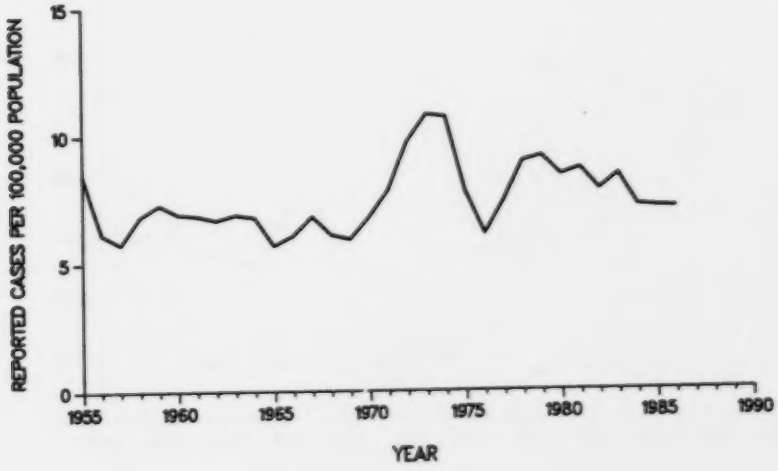
RUBELLA (German measles) — By year, United States, 1966-1986



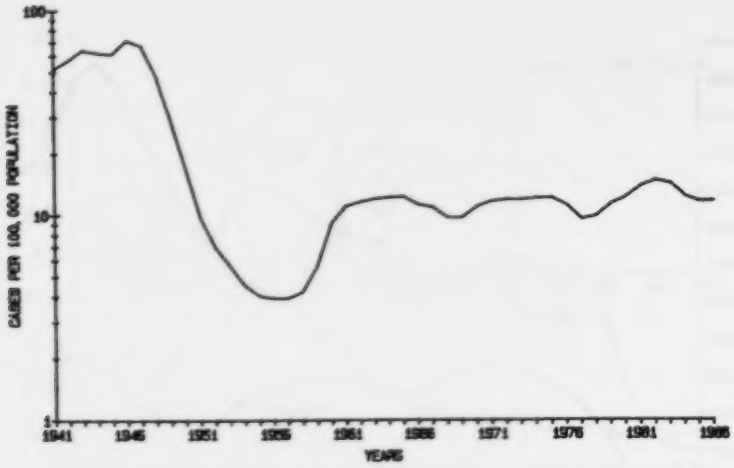
SALMONELLOSIS (excluding typhoid fever) — By year, United States, 1955-1986



SHIGELLOSIS — By year, United States, 1955-1986

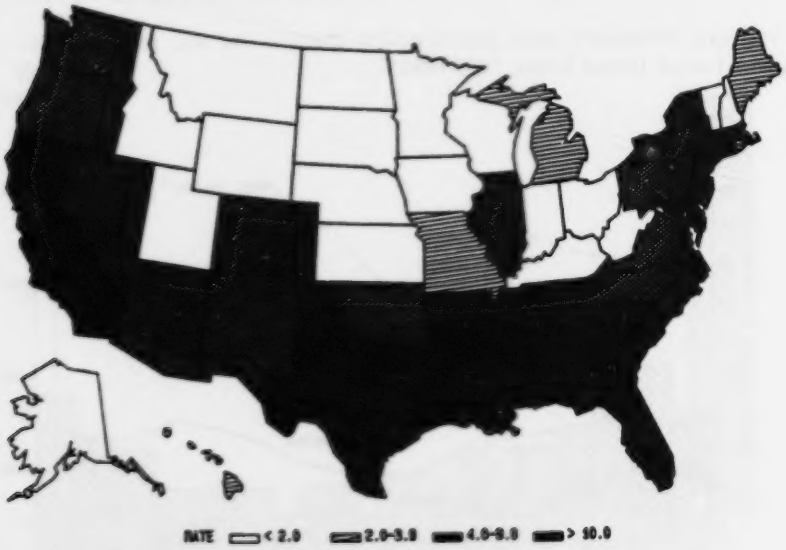


SYPHILIS (primary and secondary) — By year, United States, 1941-1986*



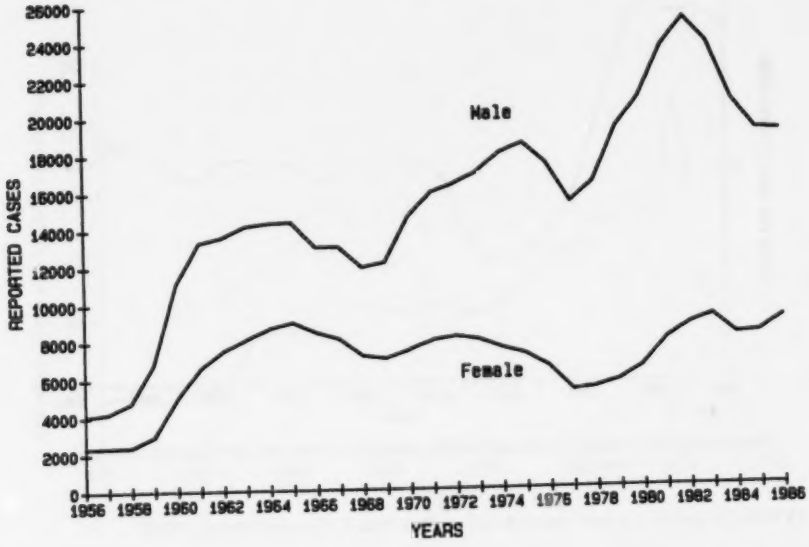
* 1941-1946 fiscal years (12-month period ending June 30); 1947-1986 calendar years.

SYPHILIS (primary and secondary) — By State*, United States, 1986

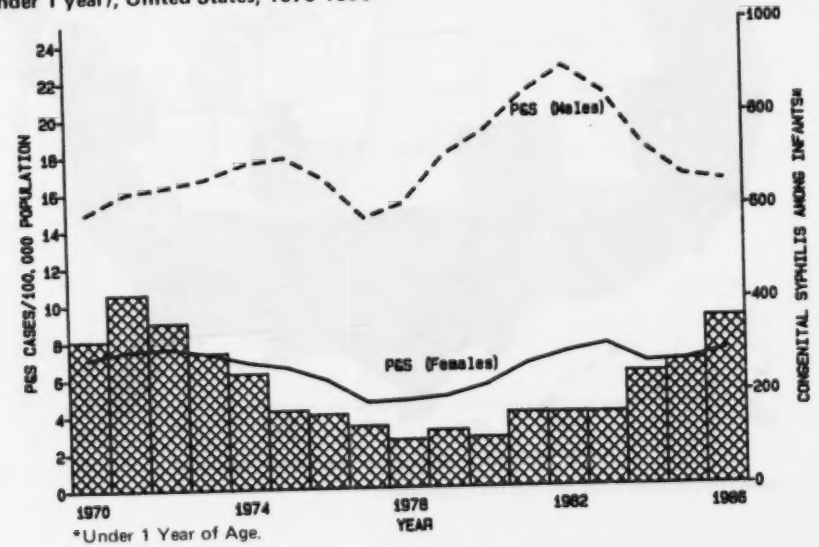


*Based on reported cases per 100,000 population.

SYPHILIS (primary and secondary) — By sex, United States, 1956-1986

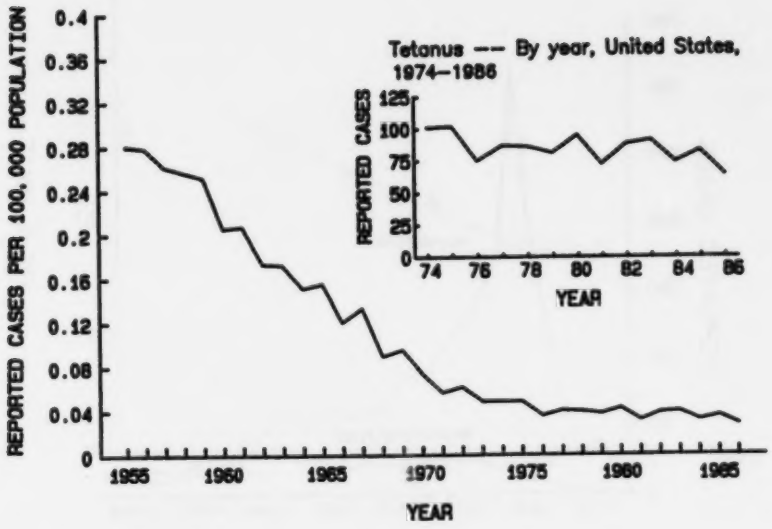


SYPHILIS, PRIMARY AND SECONDARY (P&S) — By sex, and congenital syphilis (under 1 year), United States, 1970-1986

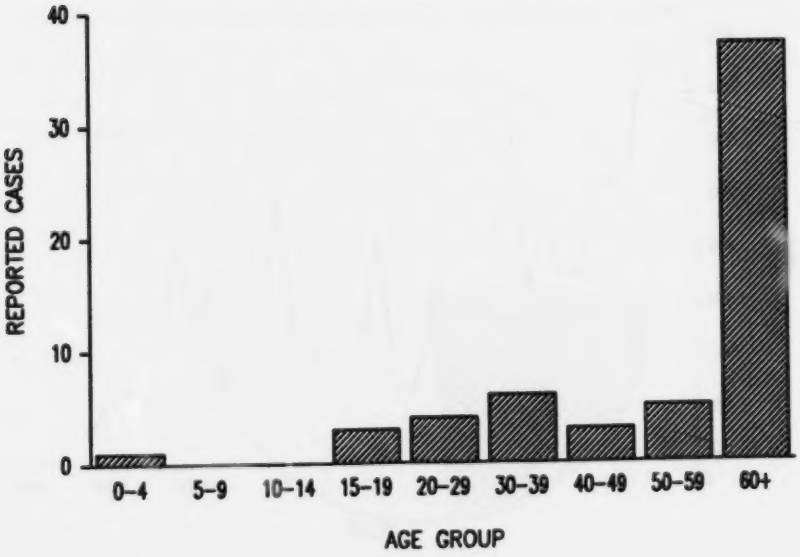


*Under 1 Year of Age.

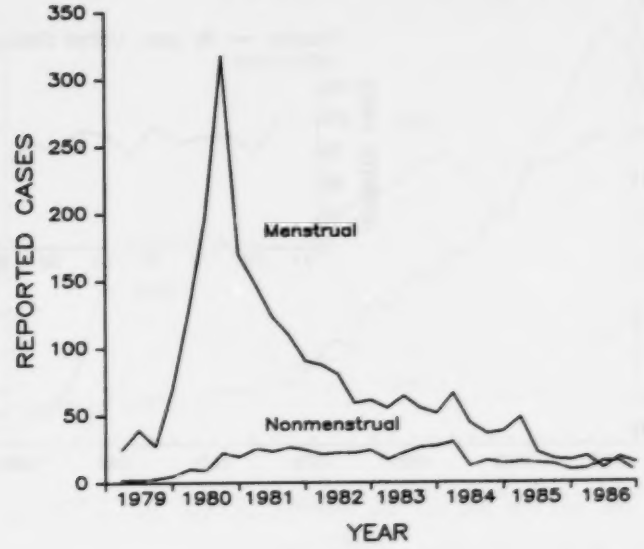
TETANUS — By year, United States, 1955-1986



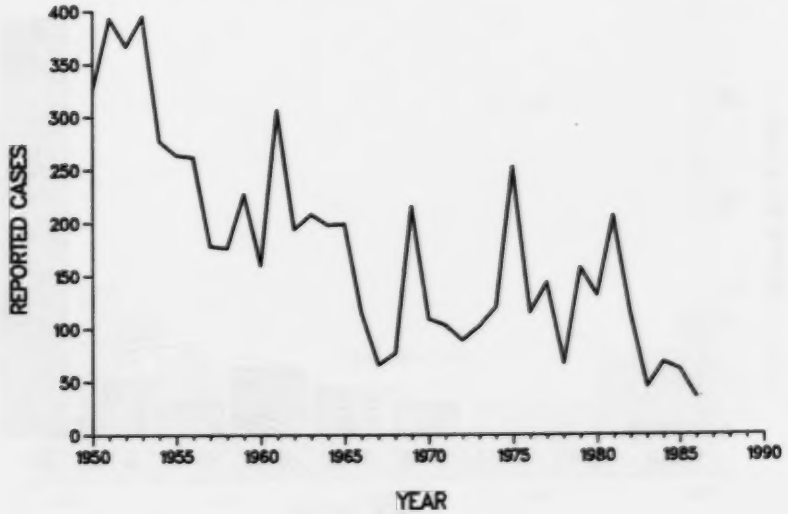
TETANUS — By age group, United States, 1986



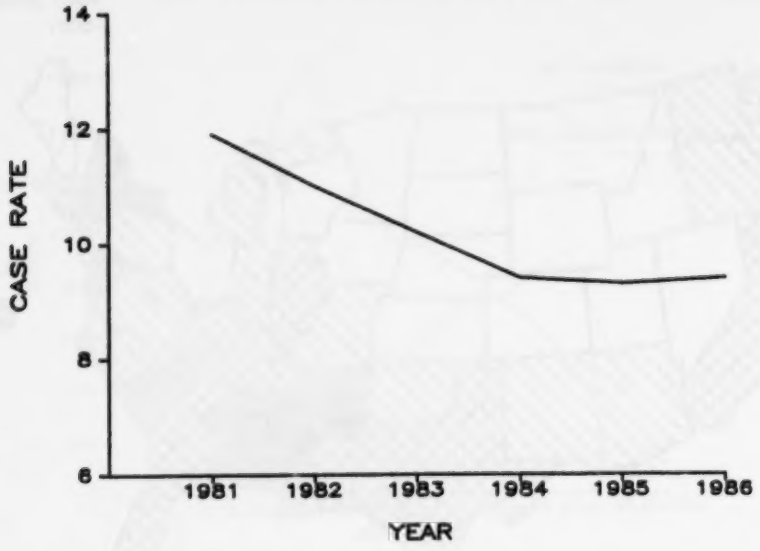
TOXIC SHOCK SYNDROME – By year, United States, 1979-1986



TRICHINOSIS – By year, United States, 1950-1986

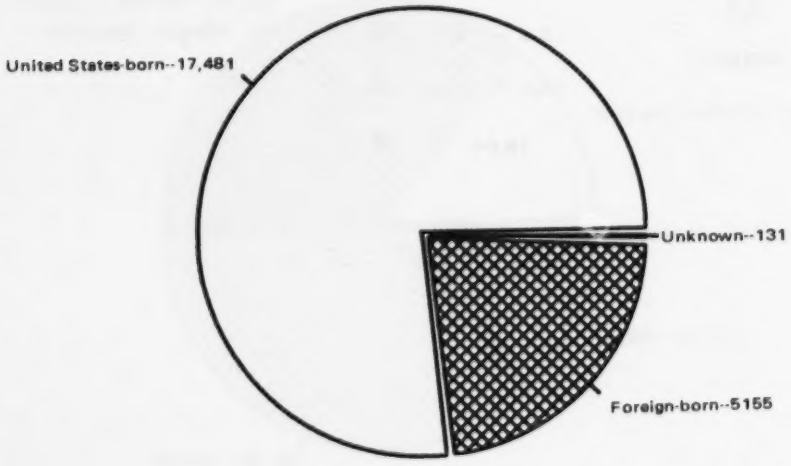


TUBERCULOSIS — Case rates, United States, 1981-1986

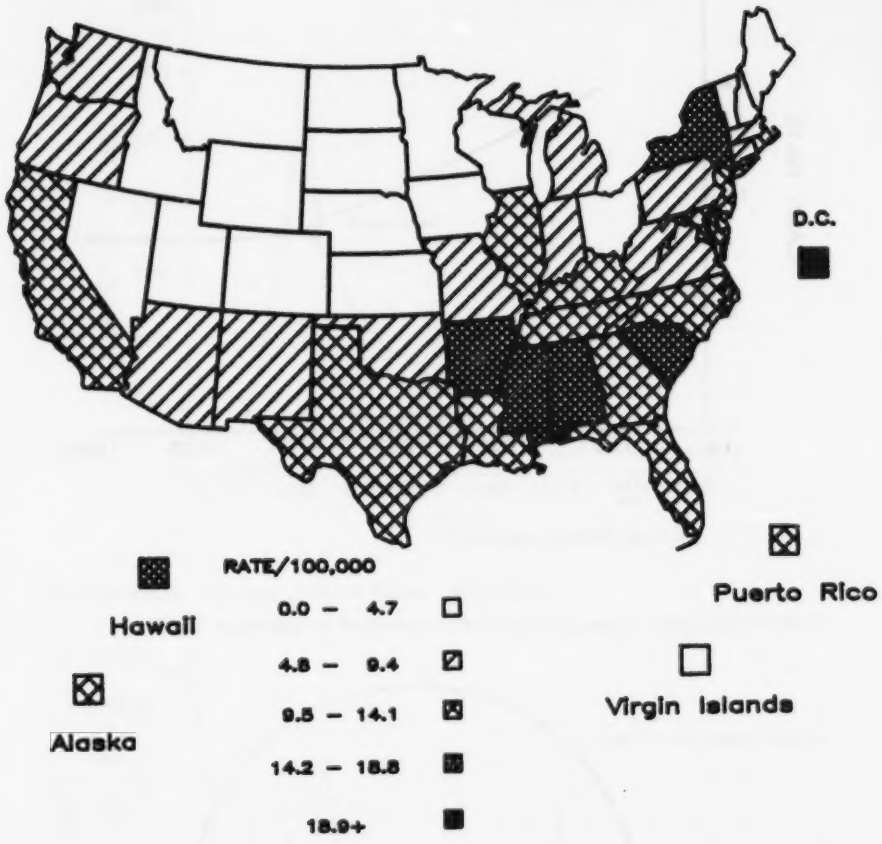


Rate per 100,000 population

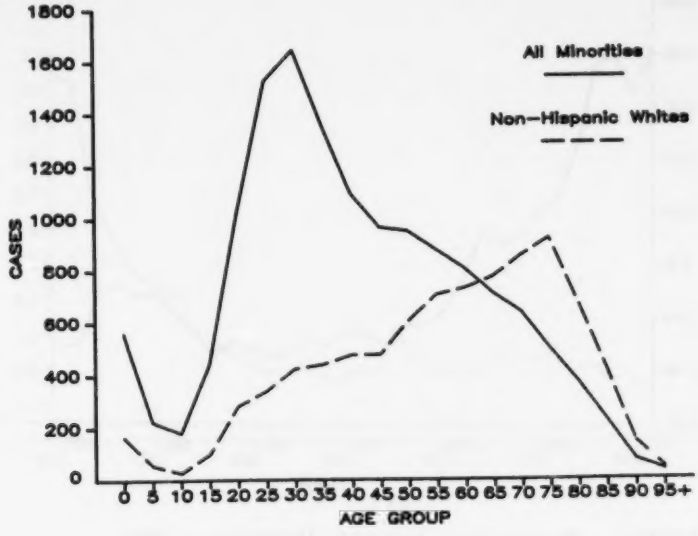
TUBERCULOSIS — Cases, United States-born and foreign-born, 1986



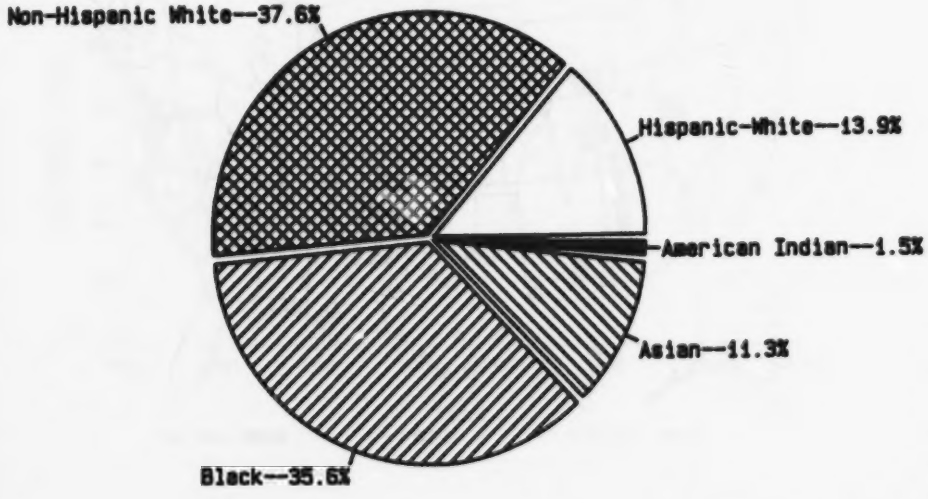
TUBERCULOSIS – Rates, by state, United States, 1986



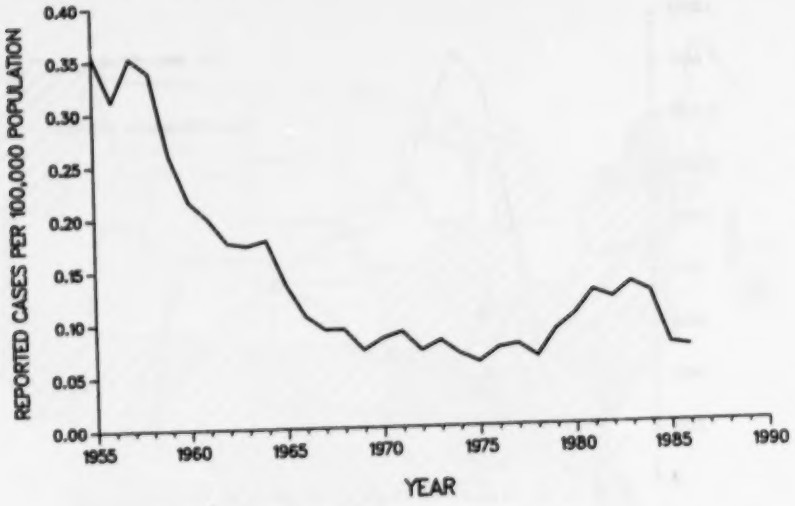
TUBERCULOSIS — Frequency distribution of cases by age, race, and ethnicity, United States, 1986



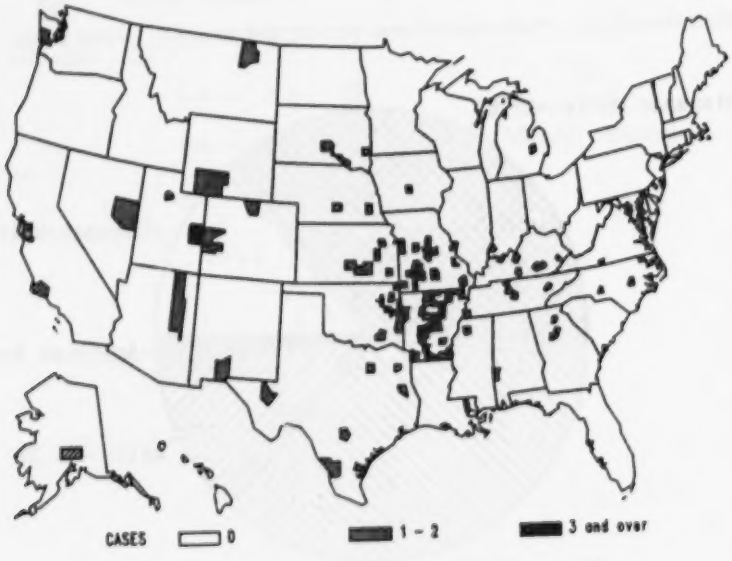
TUBERCULOSIS — Percentage of cases by race and ethnicity, United States, 1986



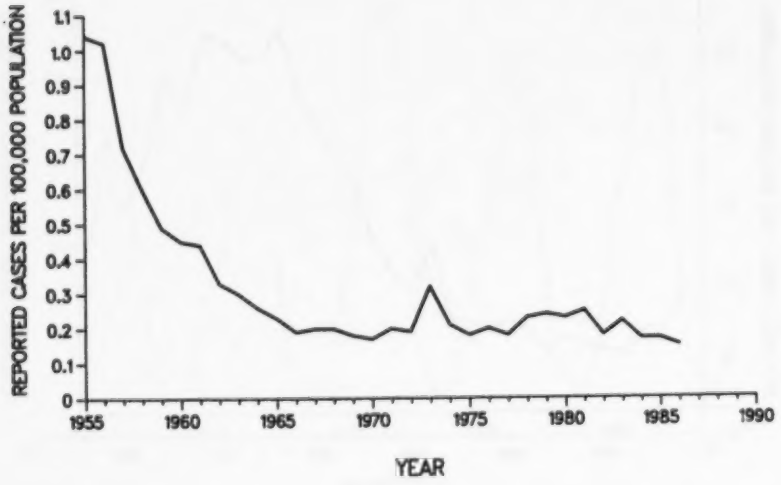
TULAREMIA – By year, United States, 1955-1986



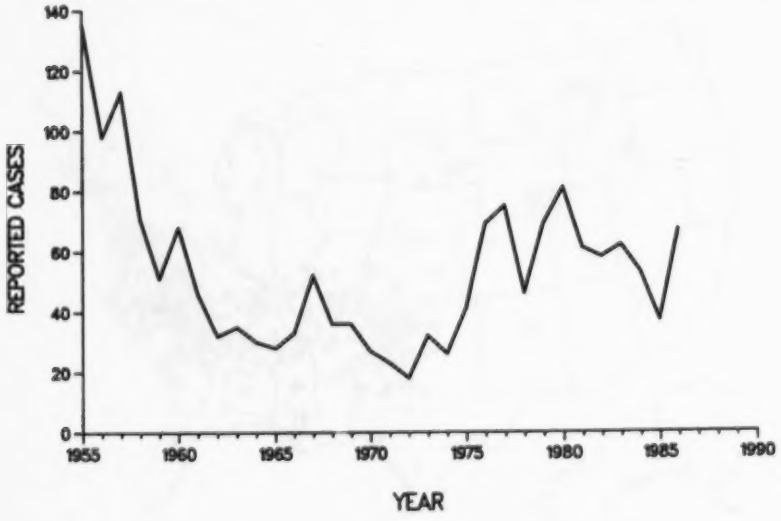
TULAREMIA – Reported cases, by county, United States, 1986



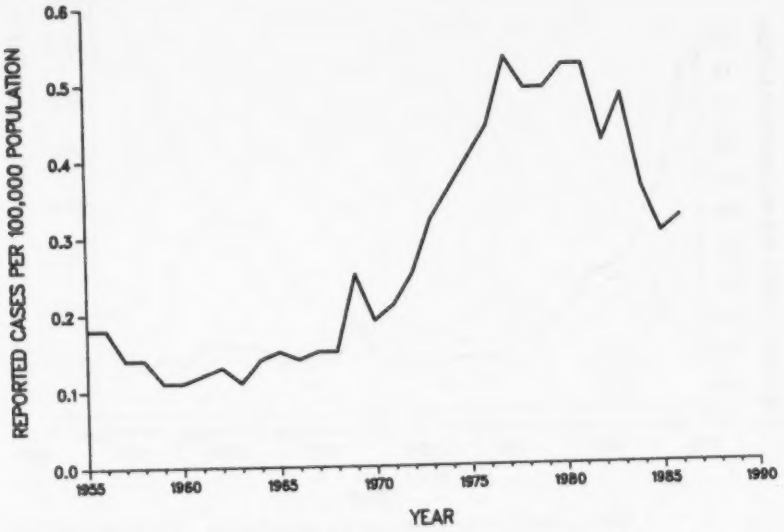
TYPHOID FEVER – By year, United States, 1955-1986



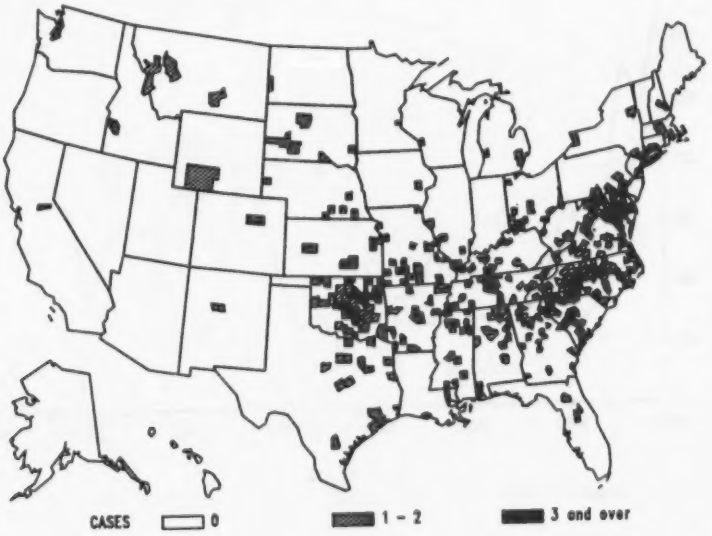
TYPHUS FEVER, FLEA-BORNE (endemic, murine) – By year, United States, 1955-1986



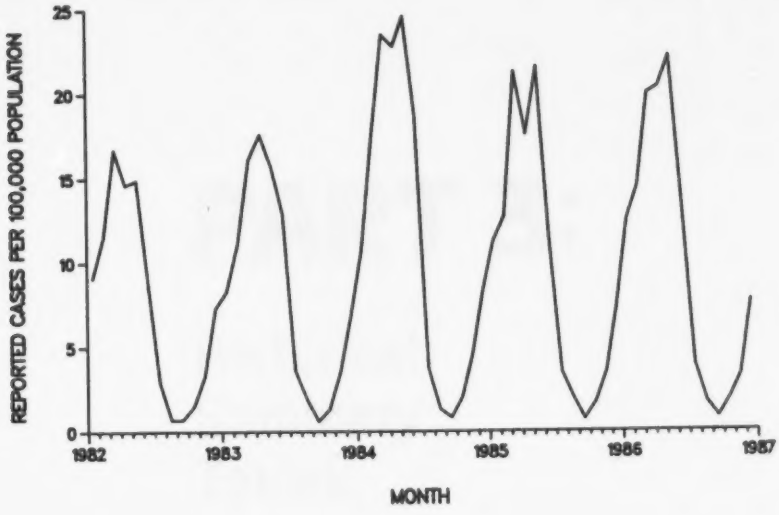
TYPHUS FEVER, TICK-BORNE (Rocky Mountain spotted fever) — By year, United States, 1955-1986



TYPHUS FEVER, TICK-BORNE (Rocky Mountain spotted fever) — Reported cases, by county, United States, 1986



VARICELLA (chickenpox) — By month, United States, 1982-1986



PART 3:

Historical Summary Tables

TABLE 1. NOTIFIABLE DISEASES—Summary of reported cases, United States, 1977-1986

Disease	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
U.S. total resident population (in thousands) 1980 census; July 1 est. 1977-1979, 1981-1986	241,078	238,740	236,158	233,981	231,534	229,307	226,505	220,099	218,059	216,332
Acquired immunodeficiency syndrome (AIDS)	12,932	8,249	4,445							
Amebiasis	3,532	4,433	5,282	6,658	7,304	6,892	5,271	4,107	3,937	3,044
Anthrax	—	—	1	—	—	—	1	—	6	—
Aseptic meningitis	11,374	10,619	8,3[illegible]	12,086	9,680	9,547	8,028	8,754	8,573	4,798
Botulism, total (including wound and unsp.)	109	122	[illegible]	133	97	103	89	45	105	128
Food-borne	23	46	19	50	33	22	18	12	66	81
Infant	79	70	69	79	61	76	68	25	39	43
Brucellosis (undulant fever)	108	153	131	200	173	186	183	215	176	230
Chancroid†	3,799	2,087	695	847	1,362	850	798	840	521	445
Cholera	23	4	1	1	—	19	9	1	12	3
Diphtheria	—	3	1	5	2	5	3	58	76	64
Encephalitis, primary§	1,302	1,378	1,257	360	374	317	323	312	290	341
Indeterminate§	NA	NA	NA	1,401	1,080	1,175	1,039	1,192	1,561	1,073
Post-infectious§	124	161	108	34	36	43	40	84	76	119
Gonorrhea†	900,888	911,419	876,556	900,435	960,633	980,964	1,004,029	1,004,068	1,013,436	1,002,219
Granuloma inguinale†	61	44	30	24	17	66	51	76	72	76
Hepatitis A	23,430[illegible]	23,210[illegible]	22,040	21,532	23,403	26,908	29,097	30,407	28,503	31,153
Hepatitis B	26,107[illegible]	26,611[illegible]	26,115	24,318	22,177	21,152	19,016	16,482	15,016	14,851
Hepatitis non-A, non-B	3,634[illegible]	4,184[illegible]	3,871	3,470	2,829					
Hepatitis, unspecified	3,840[illegible]	5,517[illegible]	5,531	7,149	8,584	10,375	11,894	10,524	8,776	8,639
Legionellosis**	948	900	790	852	954	438	475	583	761	368
Leprosy	270	361	350	359	350	358	223	186	168	161
Leptospirosis	41	57	40	61	100	82	86	94	110	71
Lymphogranuloma venereum†	368	295	170	336	336	353	199	293	284	349
Malaria	1,123	1,040	1,007	813	1,056	1,266	2,052	884	731	547
Measles (rubeola)	6,282	2,822	2,587	1,497	1,714	3,124	13,506	13,597	26,871	57,344
Meningococcal infections, total	2,584	2,479	2,748	2,732	3,058	3,526	2,840	2,734	2,506	1,898
Mumps	7,790	2,982	3,081	3,358	5,770	4,941	6,576	14,225	16,617	21,436
Pertussis (whooping cough)	4,195	3,586	2,276	2,463	1,895	1,248	1,730	1,823	2,083	2,177
Plague	10	17	31	40	19	13	16	13	12	16
Poliomyelitis, total	3	7	8	15	8	6	8	34	15	16
Paralytic††	3	7	8	15	8	6	8	26	9	17
Psittacosis	224	119	172	142	152	136	124	137	140	94
Rabies, animal	5,504	5,585	5,567	5,878	6,212	7,116	6,421	5,119	3,254	3,130
Rabies, human	—	1	3	2	—	2	—	4	4	1
Rheumatic fever, acute	147	90	117	88	137	254	432	609	651	1,726
Rubella (German measles)	861	630	752	970	2,385	2,077	3,904	11,799	18,269	20,395
Rubella congenital syndrome	14	—	5	22	7	19	30	61	30	23
Salmonellosis (excluding typhoid fever)	49,864	65,347	40,881	44,250	40,936	38,980	33,715	33,136	29,410	27,860
Shigellosis	17,138	17,057	17,371	19,719	18,139	19,859	19,041	20,135	19,511	19,052
Syphilis, primary and secondary†	27,883	27,131	26,607	32,666	33,813	31,286	27,304	24,874	21,696	20,369
Total all stages†	68,215	67,563	69,896	74,837	75,579	72,798	68,832	67,049	64,875	64,621
Tetanus	64	83	74	91	88	72	95	91	86	67
Toxic-shock syndrome	412	364	462	502						
Trichinosis	39	61	69	45	115	206	131	157	67	143
Tuberculosis§§	22,768	22,201	22,255	23,846	25,520	27,373	27,749	27,699	28,521	30,145
Tularemia	170	177	281	310	275	288	254	190	141	185
Typhoid fever (cases)	362	402	390	507	425	564	510	528	505	398
(Carriers)	53	61	54	61	60	73	62	71	62	NA
Typhus fever, flea-borne (endemic, murine)	67	37	53	62	56	61	61	69	48	75
Typhus fever, tick-borne (Rocky Mountain spotted)	760	714	636	1,126	976	1,192	1,163	1,070	1,063	1,153
Varicella (c hickenpox)	183,243	176,162	221,883	177,482	167,423	200,795	190,894	188,081	154,089	186,306
Yellow fever										

*Not previously notifiable nationally.

†Civilian cases only.

§Data for 1984-1986 reflects change in categories for tabulating encephalitis reports. Cases for 1984-1986 are recorded by date of report to state health departments. Data for previous years are from surveillance records reported by onset date.

¶Reports from New York City are not available. See footnote, Page 6.

**Data for 1982-1986 recorded by date of report to state health department. Data for all previous years are from surveillance records reported by onset date.

††Annual case reports from state health departments; numbers may not reflect changes based on retrospective case evaluations or late reports.

§§Case data subsequent to 1974 are not comparable to prior years due to changes in reporting criteria which became effective in 1975.

Last indigenous case reported 1911; last imported, 1924.

TABLE 2. NOTIFIABLE DISEASES—Summary of reported cases per 100,000 population, United States, 1977-1986

Disease	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
Acquired immunodeficiency syndrome (AIDS)	5.36	3.46	1.88	*						
Amebiasis	1.47	1.92	2.30	2.95	3.23	2.95	2.38	1.90	1.84	1.41
Anthrax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aseptic meningitis	4.72	4.50	3.57	5.49	4.18	4.16	3.61	4.05	3.01	2.24
Botulism, total	0.05	0.05	0.05	0.06	0.04	0.04	0.04	0.02	0.05	0.06
Food-borne	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.03	0.04
Infant	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.01	0.02	0.02
Brucellosis (undulant fever)	0.04	0.06	0.06	0.09	0.07	0.08	0.08	0.10	0.08	0.11
Chancroid	1.57	0.87	0.28	0.36	0.60	0.37	0.35	0.38	0.24	0.21
Cholera	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
Diphtheria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.04
Encephalitis, primary	0.54	0.56	0.53	0.15	0.16	0.14	0.14	0.15	0.13	0.16
Post-infectious	0.05	0.07	0.05	0.01	0.02	0.02	0.02	0.04	0.04	0.06
Gonorrhea	376.37	384.51	374.75	387.64	417.45	434.84	444.99	450.31	469.25	466.83
Granuloma inguinale	0.03	0.02	0.01	0.01	0.01	0.03	0.02	0.03	0.03	0.03
Hepatitis A	10.02	10.03	9.33	9.20	10.11	11.25	12.84	13.82	13.53	14.40
Hepatitis B	11.17	11.50	11.06	10.39	9.58	9.22	8.39	7.02	6.89	7.78
Hepatitis non-A non-B	1.55	1.81	1.64	1.66	1.39	*				
Hepatitis, unspecified	1.69	2.38	2.34	3.09	3.70	4.79	5.25	4.79	4.02	3.99
Legionellosis	0.43	0.37	0.35	0.43	0.35	0.18	0.21	0.27	0.35	0.17
Leprosy	0.11	0.15	0.12	0.11	0.11	0.11	0.10	0.08	0.08	0.07
Leptospirosis	0.02	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.05	0.03
Lymphogranuloma venereum	0.17	0.10	0.07	0.14	0.10	0.12	0.09	0.11	0.13	0.16
Malaria	0.47	0.44	0.43	0.35	0.46	0.61	0.91	0.41	0.34	0.25
Measles (rubeola)	2.61	1.18	1.10	0.64	0.74	1.36	5.98	6.18	12.32	26.51
Meningococcal infections, total	1.08	1.04	1.16	1.17	1.32	1.54	1.25	1.24	1.15	0.84
Mumps	3.37	1.30	1.32	1.55	2.46	2.20	3.86	6.55	7.61	10.02
Pertussis (whooping cough)	1.74	1.50	0.96	1.05	0.82	0.54	0.76	0.74	0.95	1.02
Plague	0.00	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Poliomyelitis, total	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.01	0.01
Paralytic	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01
Psittacosis	0.09	0.05	0.07	0.06	0.07	0.06	0.05	0.06	0.06	0.04
Rabies, human	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rheumatic fever, acute	0.12	0.07	0.06	0.06	0.09	0.17	0.30	0.44	0.60	1.23
Rubella (German measles)	0.23	0.26	0.32	0.41	1.00	0.91	1.72	5.36	8.38	9.43
Rubella congenital syndrome†	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.02	0.01	0.01
Salmonellosis, excluding typhoid fever	20.73	27.37	17.30	18.91	17.68	17.44	14.88	15.06	13.49	12.87
Shigellosis	7.11	7.14	7.36	8.43	7.83	8.66	8.41	9.15	8.95	7.42
Smallpox					Last documented case occurred in 1949					
Syphilis, primary and secondary	11.65	11.45	12.20	14.08	14.61	13.72	12.06	11.16	10.00	9.50
Total all stages	28.50	28.50	29.81	32.13	32.84	31.95	30.51	30.07	30.00	30.10
Tetanus	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.04
Toxic-shock syndrome	0.19	0.18	0.24	0.24	*					
Trichinosis	0.02	0.03	0.03	0.02	0.05	0.10	0.06	0.07	0.03	0.07
Tuberculosis	9.44	9.30	9.42	10.19	11.02	11.94	12.25	12.57	13.08	13.93
Tularemia	0.07	0.07	0.12	0.13	0.12	0.13	0.10	0.09	0.06	0.06
Typhoid fever (cases)	0.15	0.17	0.17	0.22	0.18	0.25	0.23	0.24	0.23	0.18
(Carriers)	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	NA
Typhus fever, flea-borne (endemic, murine)	0.03	0.02	0.02	0.03	0.03	0.03	0.04	0.03	0.02	0.04
Typhus fever, tick-borne (Rocky Mountain spotted)	0.32	0.30	0.36	0.48	0.42	0.52	0.52	0.49	0.49	0.53
Varicella (chickenpox)	122.42	123.23	138.44	99.65	94.37	100.48	96.89	102.93	80.42	97.83
Yellow fever				Last indigenous case reported 1911; last imported, 1924						

Note: Rates less than 0.01 after rounding are shown as 0.00.
Population data from those states where diseases were not notifiable (NN) or not available (NA) were excluded from rate calculation. Civilian resident population was used for chancroid, gonorrhea, granuloma inguinale, lymphogranuloma venereum, and syphilis.

*Not previously notifiable nationally.

†Per 1,000 live births.

TABLE 3. NOTIFIABLE DISEASES—Summary of reported cases, United States, 1967-1976

Disease	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967
U.S. total resident population, July 1, estimate (in thousands)	214,659	213,121	211,390	209,851	208,232	206,256	203,805	201,385	199,399	197,457
Amebiasis	2,906	2,775	2,743	2,235	2,199	2,752	2,888	2,915	3,005	3,157
Anthrax	2	2	2	2	2	5	2	4	3	2
Aseptic meningitis	3,510	4,475	3,197	4,846	4,634	5,176	6,480	3,672	4,494	3,082
Botulism	55	36	28	34	22	25	12	16	7	5
Brucellosis (undulant fever)	296	310	240	202	196	183	213	235	218	265
Chancroid	628	700	945	1,165	1,414	1,320	1,416	1,104	845	784
Cholera	—	—	—	1	—	1	—	—	—	—
Diphtheria	128	307	272	228	152	215	435	241	260	219
Encephalitis, primary	1,651	4,064	1,164	1,613	1,059	1,524	1,580	1,613	1,781	1,478
Encephalitis, post-infectious	175	237	218	354	243	439	370	304	502	1,060
Gonorrhea	1,001,994	999,937	906,121	842,621	767,215	670,268	600,072	534,872	464,543	404,836
Granuloma inguinale	71	60	47	62	81	89	124	154	156	154
Hepatitis, serum	14,973	35,855	10,631*	8,451	9,402	9,556	8,310	5,909	4,829	2,458
Hepatitis, infectious	33,288	13,121	40,358	50,749	54,074	59,606	56,797	48,416	45,893	38,909
Hepatitis, unspecified	7,488	7,158	8,351	*			*			
Legionellosis	235	*	*							
Leprosy	145	152	*18	146	130	131	129	98	123	81
Leptospirosis	73	93	68	57	41	62	47	89	69	67
Lymphogranuloma venereum	365	353	394	408	756	692	612	520	486	371
Malaria	471	373	293	237	742	2,375	3,051	3,102	2,317	2,022
Measles (rubeola)	41,126	24,374	22,094	26,690	32,275	75,290	47,351	25,826	22,231	62,705
Meningococcal infections	1,605	1,478	1,346	1,378	1,323	2,262	2,505	2,951	2,623	2,161
Mumps	38,492	59,647	59,128	69,612	74,215	124,939	104,953	90,918	152,209	*
Pertussis (whooping cough)	1,010	1,738	2,402	1,759	3,287	3,036	4,249	3,285	4,810	9,718
Plague	16	20	8	2	1	2	13	5	3	3
Poliomyelitis, total	14	8	7	8	31	21	33	20	53	41
Paralytic	12	8	7	7	29	17	31	18	53	40
Psittacosis	78	49	164	33	52	32	35	57	43	41
Rabies, animal	3,073	2,627	3,151	3,640	4,369	4,310	3,224	3,490	3,591	4,481
Rabies, human	2	2	—	1	2	2	3	1	1	2
Rheumatic fever, acute	1,865	2,854	2,431	2,560	2,614	2,793	3,227	3,229	3,470	3,985
Rubella (German measles)	12,491	16,652	11,917	27,804	25,507	45,086	56,552	57,686	49,371	46,898
Rubella congenital syndrome	30	30	45	35	42	68	77	31	14	10
Salmonellosis, excluding typhoid fever	22,937	22,612	21,980	23,818	22,151	21,928	22,096	18,419	16,514	18,120
Shigellosis (bacillary dysentery)	13,140	16,584	22,800	22,642	20,207	16,143	13,845	11,946	12,180	13,474
Smallpox	Last documented case occurred in 1949									
Streptococcal sore throat and scarlet fever	NN	NN	NN	NN	NN	NN	NN	450,008	435,013	453,351
Syphilis, primary and secondary	23,731	25,581	25,385	24,825	24,429	23,783	21,982	19,130	19,019	21,053
Total, all stages	71,761	80,366	83,771	87,469	91,149	95,997	91,362	92,162	96,271	102,581
Tetanus	75	102	101	101	128	116	148	192	178	263
Trichinosis	115	252	120	102	89	103	109	215	77	86
Tuberculosis (newly reported active cases)	32,105	33,989	30,122	30,996	32,882	35,217	37,137	39,120	42,623	45,647
Tularemia	157	129	144	171	152	187	172	149	186	184
Typhoid fever	419	375	437	580	398	407	346	364	395	396
Typhus fever, flea-borne (endemic, murine)	69	41	26	32	18	23	27	36	36	52
Typhus fever, tick-borne (Rocky Mountain spotted)	937	844	754	668	523	432	360	498	298	305
Varicella (chickenpox)	183,990	154,248	141,495	182,927	164,114	*				
Yellow fever	Last indigenous case reported 1911, last imported 1924									

*Not previously notifiable nationally.

TABLE 4. NOTIFIABLE DISEASES—Summary of reported cases, United States, 1957-1966
(Figures exclude Alaska 1957-1958 and Hawaii, 1957-1959.)

Disease	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957
U.S. total resident population, July 1, estimate (in thousands)	195,576	193,526	191,141	188,483	185,771	182,992	179,979	176,513	173,320	170,371
Amebiasis	2,921	2,768	3,304	2,866	3,046	2,850	3,424	3,508	4,380	5,031
Anthrax	5	7	5	3	9	14	23	12	16	26
Aseptic meningitis	3,058	2,329	2,177	1,844	2,654	5,162†	1,593	*	*	
Botulism	9	19	23	47	10	14	12	20	6	26
Brucellosis (undulant fever)	262	262	411	407	409	536	751	892	924	983
Chancroid	838	982	1,247	1,220	1,344	1,438	1,680	1,537	1,595	1,637
Cholera	—	2	—	—	—	—	—	—	—	—
Diphtheria	209	164	293	314	444	617	918	934	916	1,211
Encephalitis, acute infectious	3,085§	2,703§	3,567§	1,993	2,094	2,248	2,341	2,437	2,587	2,135
Gonorrhea	351,738	324,925	300,866	278,289	263,714	264,158	258,933	240,254	232,386	214,496
Granuloma inguinale	148	155	135	173	207	241	296	265	314	346
Hepatitis, infectious and serum	34,356	33,856	37,740	42,974	53,016	72,651	41,666	23,574	16,294	14,922
Leprosy	109	96	97	103	80	63	54	44	39	36
Leptospirosis	72	84	142	89	79	71	53	83	55	47
Lymphogranuloma venereum	308	878	732	586	590	787	835	604	434	448
Malaria	565	147	93	99	118	73	72	71	85	132
Measles (rubeola)	204,136	261,904	458,083	385,156	481,530	423,919	441,703	406,162	763,094	486,799
Meningococcal infections	3,381	3,040	2,826	2,470	2,150	2,232	2,259	2,180	2,581	2,691
Pertussis (whooping cough)	7,717	6,799	13,005	17,135	17,749	11,468	14,609	40,005	32,148	26,295
Plague	5	8	—	1	—	3	2	4	—	1
Poliomyelitis	113	72	122	449	910	1,312	3,190	8,425	5,787	5,485
Paralytic	106	61	106	396	762	966	2,525	6,269	3,697	2,400
Psittacosis	50	60	53	76	79	102	113	147	158	278
Rabies, human¶	1	2	1	1	2	3	2	7	5	5
Rabies, animal	4,178	4,574	4,780	3,929	3,732	3,599	3,567	4,177	4,767	4,542
Rheumatic fever, acute	4,472	4,998	7,491	7,561	7,977	10,470	9,022	8,285	6,899	6,427
Rubella (German Measles)	46,975	*	*							
Rubella congenital syndrome	11	*	*							
Salmonellosis, excluding typhoid fever	16,841	17,161	17,144	15,390	9,680	8,542	6,929	6,606	6,363	6,693
Shigellosis	11,668	11,027	12,984	13,009	12,443	12,571	12,467	12,868	11,961	9,822
Smallpox	Last documented case occurred in 1949									
Streptococcal sore throat and scarlet fever	427,752	395,168	402,334	342,161	315,809	338,410	315,173	334,715	264,097	226,973
Syphilis, primary and secondary	21,414	23,338	22,999	22,251	21,067	19,851	16,145	9,799	7,176	6,576
Total, all stages	105,159	112,842	114,325	124,137	126,246	124,658	122,536	120,824	113,884	123,758
Tetanus	236	300	289	325	322	379	366	445	445	447
Trichinosis	115	199	198	208	194	306	160	227	176	178
Tuberculosis**	47,767	49,016	50,874	54,042	53,315	53,726	55,494	57,535	63,534	67,149
Tularemia	208	264	342	327	328	365	390	459	567	601
Typhoid fever	378	454	501	566	606	814	816	869	1,043	1,231
Typhus fever, flea-borne (endemic, murine)	33	29	30	35	32	46	68	51	71	113
Typhus fever, tick-borne (Rocky Mountain spotted)	268	281	277	216	240	219	204	199	243	240
Yellow fever	Last indigenous case reported 1911; last imported, 1924									

*Not previously notifiable nationally.

†Includes Meningitis, other, for some states.

§Includes primary and post-infectious.

¶Registered deaths, 1957-1960.

**Includes new active cases.

TABLE 5. NOTIFIABLE DISEASES—Summary of reported cases, United States, 1947-1956

Disease	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947
U.S. total resident population, July 1, estimate (in thousands)	167,306	164,308	161,164	158,242	155,687	153,310	151,235	148,665	146,093	143,448
Amebiasis	3,689	3,348	3,523	4,444	4,280	3,550	4,568	5,543	4,871	3,365
Anthrax	38	39	22	45	47	60	49	54	60	69
Botulism	17	16	18	18	18	33	20	24	39	44
Brucellosis (undulant fever)	1,300	1,444	1,823	2,032	2,537	3,139	3,510	4,235	4,991	6,321
Chancroid*	2,135	2,649	3,003	3,338	3,738	4,233	4,977	6,707	7,661	9,515
Cholera	—	—	—	—	—	—	—	—	—	—
Dengue	2	1	6	8	5	16	26	46	24	35
Diphtheria	1,568	1,984	2,041	2,355	2,960	3,983	5,796	7,969	9,493	12,282
Encephalitis, acute infectious	2,624	2,166	2,606	1,935	1,912	1,123	1,135	903	730	785
Gonorrhea*	224,346	236,197	242,050	238,340	244,957	254,470	286,746	317,950	345,501	380,666
Granuloma inguinale*	357	490	618	667	951	1,352	1,783	2,402	2,469	2,330
Hepatitis, infectious†	19,234	31,961	50,093	33,700	17,428	7,349	2,820	2,027	709	1,092
Leprosy	52	75	56	60	57	57	44	41	63	56
Leptospirosis	44	24	48	42	62	9	30	17	18	14
Lymphogranuloma venereum*	500	762	875	983	1,200	1,300	1,427	1,925	2,429	2,526
Malaria	234	522	715	1,310	7,023	5,600	2,184	4,151	9,606	15,116
Measles	611,936	555,156	682,720	449,146	683,077	530,118	319,124	625,281	615,104	222,375
Meningococcal infections	2,735	3,455	4,436	5,077	4,884	4,164	3,788	3,519	3,376	3,420
Pertussis (whooping cough)	31,732	62,786	90,886	37,129	45,030	68,687	120,718	69,479	74,715	156,517
Plague	1	—	—	—	—	1	3	3	—	1
Poliomyelitis, total	15,140	28,985	38,476	35,592	57,879	28,386	33,300	42,033	27,726	10,827
Paralytic	7,911	13,850	18,308	15,648	21,269	10,037	NA	NA	NA	NA
Psittacosis	568	334	563	189	135	25	26	35	32	27
Rabies, human§	10	4	13	12	24	18	18	10	24	26
Rabies, animal¶	5,681	5,799	7,297	8,903	8,445	8,008	7,901	7,587	8,495	8,920
Rheumatic fever, acute†	6,562					*				
Salmonellosis, excluding typhoid fever	6,704	5,447	5,375	3,946	2,596	1,773	1,233	1,243	882	951
Shigellosis (bacillary dysentery)	10,306	13,912	13,846	16,533	23,197	32,215	23,367	29,080	23,753	17,048
Smallpox	—	—	—	—	—	—	—	49	57	176
Streptococcal sore throat and scarlet fever	176,392	147,502	147,785	132,935	113,677	84,151	64,494	87,220	91,295	93,595
Syphilis, primary and secondary*	6,392	6,454	7,147	8,637	10,449	14,485	23,939	41,942	66,174	93,545
Total, all stages*	130,201	122,392	130,697	148,573	167,762	174,924	217,558	256,463	314,313	355,592
Tetanus	468	462	524	506	484	506	486	579	601	560
Trichinosis	262	264	277	395	367	393	327	353	487	451
Tuberculosis**	69,895	77,366	79,775	84,304	86,700	118,491	121,742	134,865	137,006	134,946
Tularemia	522	584	681	601	668	702	927	1,179	1,086	1,401
Typhoid fever	1,700	1,704	2,169	2,252	2,341	2,128	2,484	2,795	2,840	3,075
Typhus fever, flea-borne (endemic, murine)	98	135	163	221	205	378	685	985	1,171	2,050
Typhus fever, tick-borne (Rocky Mountain spotted)	293	295	294	313	327	347	464	570	547	596
Yellow fever	Last indigenous case reported 1911; last imported, 1924.									

*Data reported for calendar year.

†Data for 1953—1956 includes serum hepatitis.

§Registered deaths.

¶Data from Bureau of Animal Industry, U.S. Department of Agriculture, Agricultural Research Administration, 1947-1951.

**Includes newly reported active and inactive cases, 1947-1951; new active cases, 1952-1956.

TABLE 6. NOTIFIABLE DISEASES—Summary of reported cases, United States, 1937-1946

Disease	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937
U.S. total resident population, July 1, estimate (in thousands)	140,054	132,481	132,885	134,245	133,920	133,121	131,954	130,880	129,825	128,825
Amebiasis	4,093	3,412	3,241	3,329	2,721	3,201	3,033	3,001	2,297	2,049
Anthrax	40	40	49	72	94	104	76	54	52	65
Botulism	NA									
Brucellosis (undulant fever)	5,887	5,049	4,436	3,733	3,228	3,454	3,310	3,501	4,379	2,676
Chancroid*	7,091	5,515	7,878	8,354	5,477	3,384	NA	NA	NA	NA
Cholera	—	—	—	—	—	—	—	—	NA	NA
Dengue	40	106	61	123	171	600	66	144	250	350
Diphtheria	16,354	18,675	14,150	14,811	16,260	17,987	15,536	24,053	30,508	28,536
Encephalitis, acute infectious	728	785	788	771	686	3,516	1,030	928	1,073	1,030
Gonorrhea*	368,020	287,181	300,676	275,070	212,403	193,468	175,841	182,314	198,439	182,460
Granuloma inguinale*	2,232	1,857	1,759	1,748	1,278	639	NA	NA	NA	NA
Hepatitis, infectious	NA									
Leprosy	43	40	37	35	70	NA	NA	NA	NA	NA
Leptospirosis	NA									
Lymphogranuloma venereum*	2,603	2,631	2,858	2,593	1,868	1,381	NA	NA	NA	NA
Malaria	48,610	62,763	57,626	54,554	60,077	68,074	78,129	82,654	84,205	108,459
Measles	695,843	146,013	630,291	633,627	547,413	894,134	291,162	403,317	822,811	321,510
Meningococcal infections	5,893	8,218	16,312	18,223	3,823	2,006	1,653	1,972	2,859	5,484
Pertussis (whooping cough)	109,860	133,792	109,873	191,890	191,383	222,202	183,866	183,188	227,319	214,652
Plague	—	—	1	1	1	2	1	1	—	2
Poliomyelitis, acute	25,698	13,624	19,029	12,450	4,167	9,086	9,804	7,343	1,705	9,514
Psittacosis	26	27	6	1	23	11	NA	NA	NA	NA
Rabies, human†	34	43	56	47	36	39	41	40	66	59
Rabies, animal§	10,850	9,928	10,487	9,649	7,137	7,847	7,210	9,365	6,816	6,632
Salmonellosis	723	649	712	731	504	NA	NA	NA	NA	NA
Shigellosis (bacillary dysentery)	24,286	34,943	38,230	31,590	25,572	18,972	17,501	16,537	15,886	NA
Smallpox	337	346	397	765	865	1,396	2,795	9,877	14,939	11,673
Streptococcal sore throat and scarlet fever	125,511	185,570	200,539	150,362	135,755	139,424	165,766	173,162	198,428	236,361
Syphilis, primary and secondary*	94,957	77,007	78,443	82,204	75,312	68,231	NA	NA	NA	NA
Total, all stages*	363,647	359,114	467,755	575,593	479,601	485,560	472,900	478,738	480,140	336,258
Tetanus	NA									
Trichinosis	NA									
Tuberculosis¶	119,256	114,931	126,294	120,253	117,204	105,567	102,984	103,922	107,021	112,394
Tularemia	1,355	900	781	966	1,024	1,530	1,620	2,291	2,088	960
Typhoid fever**	3,268	4,211	4,599	4,690	5,595	8,601	9,809	13,069	14,903	16,033
Typhus fever, flea-borne (endemic, murine)	3,365	5,193	5,401	4,528	3,736	2,784	1,878	2,996	2,294	2,394
Typhus fever, tick-borne (Rocky Mountain spotted)	587	472	470	473	498	516	457	559	434	432
Yellow fever	Last indigenous case reported 1911; last imported, 1924									

*Data reported for fiscal years.

†Registered deaths.

§Data from Bureau of Animal Industry, U.S. Department of Agriculture, Agricultural Research Administration.

¶Includes newly reported active and inactive cases.

**Includes cases of paratyphoid 1937-1941.

TABLE 7. NOTIFIABLE DISEASES—Deaths from specified notifiable diseases, United States, 1975-1984

(Numbers in ICD column refer to the category numbers listed in the Ninth Revision of the International Classification of Diseases, 1975.)

Cause of Death	ICD	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975
Amebiasis	006	10	21	7	16	22	19	14	28	36	35
Anthrax	022	—	—	—	—	—	—	—	—	—	—
Botulism, foodborne	005.1	4	7	4	3	5	2	5	6	3	3
Brucellosis	023	—	—	2	1	—	2	3	—	2	—
Chancroid	099.0	—	—	—	—	—	—	—	—	—	—
Cholera	001	—	—	—	3	1	—	—	—	—	—
Diphtheria	032	—	—	1	—	1	1	4	5	7	5
Encephalitis, acute infectious*	062-064,049	168	169	166	164	188	172	185	206	253	386
Gonococcal infections	098	3	4	6	4	7	1	9	1	1	1
Granuloma inguinale	099.2	—	—	—	—	1	1	1	—	—	1
Hepatitis, viral, infectious (Hepatitis A)	070.0,070.1	77	82	83	93	112	129				
Hepatitis, viral, serum (Hepatitis B)	070.2,070.3	465	438	375	359	294	260	508	508	567	612
Hepatitis, viral, other and unsp.	070.4-070.9	327	343	356	410	403	364				
Leprosy	030	6	3	3	2	—	3	4	1	1	2
Leptospirosis	100	—	5	4	5	2	4	5	8	12	7
Lymphogranuloma venereum	099.1	—	—	1	1	1	1	—	—	—	2
Malaria	084	7	3	2	7	—	3	5	3	4	4
Measles (rubeola)	055	1	4	2	2	11	6	11	15	12	20
Meningococcal infection	036	300	299	364	459	387	404	403	338	330	308
Mumps	072	1	2	2	1	2	2	3	5	8	8
Pertussis (whooping cough)	033	7	5	4	6	11	6	6	10	7	8
Plague	020	3	5	3	3	5	2	—	—	2	3
Poliomyelitis	045.0-045.9	—	—	—	—	6	4	13	16	16	9
Bulbar or polioencephalitis	045.0	—	—	—	—	—	—	—	2	3	2
With other paralysis	045.1	—	—	—	—	2	1	1	2	1	1
Non-paralytic	045.2	—	—	—	—	—	—	—	—	—	—
Unspecified	045.9	—	—	—	—	4	3	12	12	12	6
Psittacosis (ornithosis)	073	—	1	—	—	—	—	1	—	—	—
Rabies	071	2	2	—	1	—	4	2	—	1	2
Rheumatic fever, acute	390-392	70	87	77	96	109	114	138	125	149	155
Rubella (German measles)	056	1	3	4	5	1	1	10	17	12	21
Salmonellosis, including paratyphoid fever	002.1-002.9,003	90	82	89	105	89	70	79	73	61	67
Shigellosis	004	8	9	9	11	15	19	20	25	19	27
Syphilis	090-097	105	121	126	136	154	180	189	196	225	272
Tetanus	037	20	22	22	31	28	30	32	24	32	45
Trichinosis	124	—	—	—	—	1	2	—	—	1	—
Tuberculosis (all forms)	010-018	1,729	1,779	1,807	1,937	1,978	2,007	2,914	2,968	3,130	3,333
Tularemia	021	2	1	2	1	3	2	—	2	2	—
Typhoid fever	002.0	—	3	2	2	2	3	2	3	2	3
Typhus fever, flea-borne (endemic-murine)	081.0	—	—	—	—	—	—	—	—	1	—
Typhus fever, tick-borne (Rocky Mountain spotted)	082.0	34	35	40	30	38	32	30	43	41	29
Varicella (chickenpox)	052.0	53	57	61	84	78	103	91	89	106	83

*Arthropod-borne encephalitis and other non-arthropod-borne viral diseases of the central nervous system.

Source: National Center for Health Statistics, *Vital Statistics of the United States, Vol. II, Part A*, for 1975-1982. Unpublished final data, National Center for Health Statistics, 1983-1984.

Deaths are classified according to the Eighth Revision, ICD, for 1975-1978 and according to the Ninth Revision, ICD, for 1979-1984. Discontinuities for some causes may result due to the introduction of the Ninth Revision

State and Territorial Epidemiologists and State Laboratory Directors

The contributions of the State and Territorial Epidemiologists and the State Laboratory Directors to this report are gratefully acknowledged. The persons listed were in the positions shown as of July 15, 1987.

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